



Missouri Department of Transportation and Highway Patrol
Employees' Retirement System
A Component Unit of the State of Missouri

Honoring Our Past, Building Our Future
MODOT & PATROL EMPLOYEES'
RETIREMENT SYSTEM

70

ANNIVERSARY

1955 - 2025

MoDOT & Patrol Employees' Retirement System
**Annual Comprehensive
Financial Report**
For the Fiscal Year Ended June 30, 2025

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MoDOT & Patrol Employees' Retirement System
A Component Unit of the State of Missouri

Annual Comprehensive Financial Report

For the Fiscal Year Ended June 30, 2025

Scott Simon
Executive Director

Jennifer Even
Chief Financial Officer



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This is a digital publication of the Missouri Department of Transportation and Missouri State Highway Patrol Employees' Retirement System. No printing costs were incurred.

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INTRODUCTORY SECTION

Honoring Our Past, Building Our Future

A Foundation Laid in Asphalt and Vision

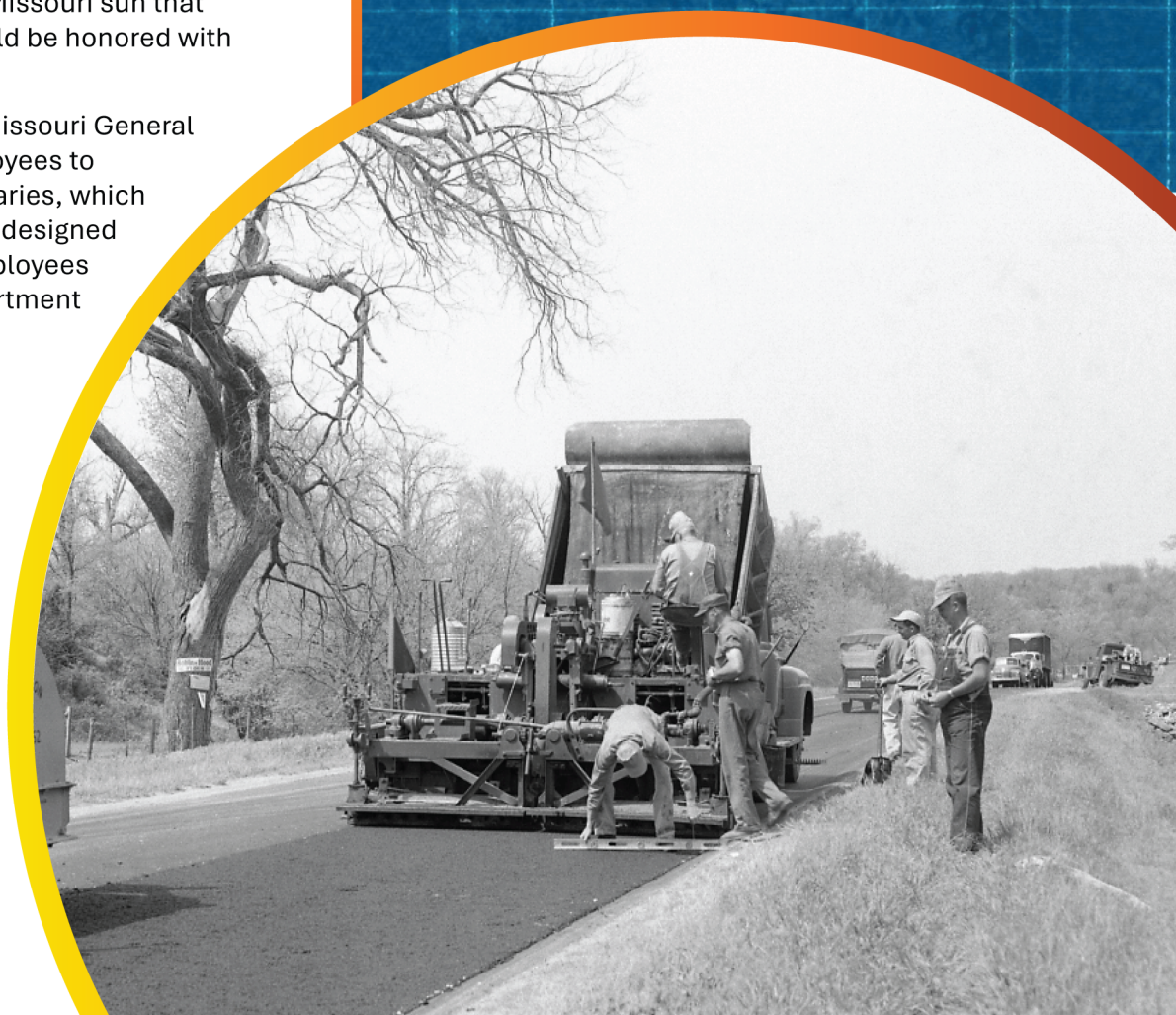
In 1955, Missouri was building more than roads. It was creating a future. That year, as the Highway Department crews laid pavement across the state and Highway Patrol officers safeguarded the growing network of highways, the state took a bold step forward: the creation of a retirement system dedicated to those who served Missouri's transportation mission.

The retirement plan was born from the same spirit that drove the Centennial Road Law of 1921 and the sweeping modernization efforts of the 1950s. It reflected a belief that public service deserves lasting security. It was a promise to the patrolman standing beside his cruiser and to the road crew laying asphalt under the Missouri sun that their years of service would be honored with stability and care.

The plan, passed by the Missouri General Assembly, required employees to contribute 4% of their salaries, which the state matched. It was designed to support over 4,000 employees across the Highway Department and the Highway Patrol.

Image:

*Road crew paving a highway,
1955*



November 6, 2025

To the Board of Trustees and System Members:

We are pleased to provide this Annual Comprehensive Financial Report (Annual Report) of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS) for the fiscal year ending June 30, 2025. This report is intended to provide MPERS' stakeholders with a thorough review of the System's operations for the past fiscal year. The material presented in this report has been prepared in a manner intended to be valuable and informative to MPERS' members, the management of the Missouri Department of Transportation (MoDOT) and the Missouri State Highway Patrol (MSHP), and the elected officials of the state of Missouri.

MPERS is a defined benefit pension plan designed to be an effective employee recruitment and retention tool for covered employers. It provides lifetime retirement benefits to eligible MoDOT, MSHP, and MPERS employees. The monthly retirement and survivor benefits MPERS provides are a valuable source of retirement income for the members we serve. These benefits, when combined with social security and personal savings, provide the foundation for our members to leave the workforce and enjoy their retirement years with the dignity they deserve.

The average monthly benefit of a new MPERS retiree in Fiscal Year 2025 was \$3,092, which equates to \$37,104 per year. Given the increasing cost of living, this amount alone will not provide a comfortable lifestyle for the retiree. However, this monthly benefit and those provided by other traditional pension plans have a significant impact that reaches beyond the retirees served. Over the past 10 years alone, MPERS has paid over \$2.72 billion in benefit payments to its members. Nearly 92% of these retirees and beneficiaries reside in Missouri, reinvesting their retirement dollars in housing, goods, and services. This reinvestment improves the local economy, which in turn helps to fuel the state's overall economy. The result is that defined benefit pensions have a long-term positive impact on our economy and the lives of our members.

Report Contents and Structure

This *Annual Report* complies with the statutory reporting requirements stipulated in sections 104.190, 104.1006, and 105.661 of the Missouri Revised Statutes, as amended.

To the best of our knowledge, the information presented is accurate in all material respects and reported in a manner designed to represent the fund's financial position fairly. Some amounts included in the financial statements and elsewhere may be based on estimates and judgments. These estimates and judgments are products of best business practices. The accounting policies followed in preparing the basic financial statements conform with U.S. generally accepted accounting principles (GAAP). Financial information presented throughout the *Annual Report* is consistent with information displayed in the basic financial statements.

The MPERS Board of Trustees (Board) is ultimately responsible for the Annual Report and basic financial statements. MPERS' executive director and staff prepare the information contained in these documents to assist the Board in fulfilling its statutory duty.

Systems of internal controls and supporting procedures are maintained to provide assurances that transactions are authorized, assets are safeguarded, and proper records are kept. These controls include standards in hiring and training employees, establishing an organizational structure and communicating policies and guidelines throughout the organization. Inherent limitations exist in all control systems. No evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud have been detected. The objective of internal controls is to provide reasonable assurance that the financial statements are free of any material misstatements, recognizing that a control's cost should not exceed its benefit.

In accordance with section 104.190 RSMo., Williams-Keepers, LLC, an independent auditing firm, has audited the financial statements included in this report and has issued an unmodified opinion (i.e., no audit concerns relating to MPERS' financial statements). The opinion letter of Williams-Keepers, LLC is presented in the "Financial Section" of this Annual Report. "Management's Discussion and Analysis" immediately follows the "Independent Auditor's Report" and provides an introduction, overview, and analysis of the basic financial statements.

Background Information

MPERS was established by Senate Bill 66 in the 68th General Assembly. In accordance with this legislation, employees of MoDOT and MSHP became members of the retirement system on September 1, 1955. Effective October 1, 1955, the System accepted 109 retirements. Employees of MPERS became members of the System after the passage of Senate Bill 371 in 2001.

The plan provisions have changed many times over the years. The System offers not only enhanced retirement and disability benefits but also benefits for survivors of active and retired members, benefits for vested former members, and death benefits.

MPERS' 11-member Board oversees the System. The trustees serve as fiduciaries and are responsible for selecting and retaining competent management. The trustees and management jointly establish sound policies and objectives, monitor operations for compliance, and oversee performance.

MPERS is considered a component unit of the state of Missouri for financial reporting purposes, and the financial statements in this report are also included in the *State of Missouri's Annual Comprehensive Financial Report*.

Fiscal Year 2025 Highlights

It is with gratitude, appreciation, and some melancholy that I recognize this annual report will be the last for Jennifer Even, MPERS' first and only CFO for the past 19 years. She is looking forward to a much anticipated and well-deserved retirement. Jennifer started with MPERS in 2006. Over that time, her development and production of these annual reports have consistently achieved the GFOA Award for Excellence in Financial Reporting. The excellence did not stop there; it was demonstrated in everything Jennifer did. Whether it be financial reporting and accounting, investment accounting and reporting, tax filing, budget development and oversight, audit management, payroll, or serving as the funding historian for the System, she took her work seriously, served MPERS professionally, and delivered decisively. Having been in the pension industry for nearly three decades, I have observed and associated with several CFOs. I have yet to find anyone more competent and knowledgeable than Jennifer. She served the System and its members with confidence and sincerity every day. On a personal level, I will miss the professional partnership we have had for so many years, but I wish her the best and a healthy retirement.

With Jennifer's planned retirement and others on the horizon, succession planning was a key factor in this fiscal year's activity. MPERS has a solid track record for recruitment and retention, and like many organizations, we are on the front end of several anticipated retirements in the coming years. To prepare for this historic loss of institutional knowledge and to maintain the high service expectations of our members, the Board supported a plan to recruit, train, and replace several key roles. It is this preparation that will help us maintain customer service expectations and a risk management focus as the next generation of MPERS staff rolls into the organization. The friendly faces you know and trust are diligently working to build the team that will maintain our progress and take it to new heights.

Similarly, the Board also supported the transition from PensionGold Version 3 to Version 4. PensionGold is the database that revolutionized MPERS' benefit administration efforts. It not only supports staff's efforts in member services and payroll tracking but also delivers monthly benefit payments and supports the 24/7 myMPERS experience our members enjoy. This transition is a significant project for the team, but it is essential to maintain the current infrastructure that serves the reason for our existence and maintains the security protocols necessary in today's high-risk environment. This project was launched during Fiscal Year 2025 but will likely not be completed until Fiscal Year 2027. Here again, the Board of Trustees is keeping the organization moving forward by maintaining the staff and resources necessary to continue the service excellence we intend to deliver every day.

Again, in the spirit of planning, the last item to acknowledge for this period is the acquisition of MPERS' new office space. With this annual report, we are saying "farewell" to 1913 William Street and "hello" to 813 West Stadium Boulevard. The acquisition and occupancy of 1913 William Street represented MPERS' first dedicated home. The time spent at William Street, which began in 2002, represents a significant period in the System's evolution. It was this period that brought us to where we are today. The progress achieved during this period is remarkable. Without it, success and advancement were not likely. With it, MPERS has achieved success once unimaginable. As we say goodbye to MPERS' first home, we are embracing MPERS' new forever home. The new office space was designed to support continued success in recruitment and retention efforts, foster a safe and productive working environment, and build upon the service expectations of our members. The new and improved space, including enhanced technology, will serve the System indefinitely and provide us with opportunities we would not have had in our previous space.

Finally, as you will see throughout this report, MPERS' funded status has once again reached another all-time high. Although our progress is still incomplete, and the objective is to be fully funded, I cannot ignore the continued support and dedication of the Board of Trustees. Beginning in 2006, the MPERS Board of Trustees took the first steps toward addressing the historical funding shortfalls. It has taken time and patience, but the progress is noticeable and is finally reaching a point where covered employers are seeing contribution rate relief. This is a remarkable story with a few more chapters to unfold, but far enough to acknowledge that, with the right policies and people, amazing things can be done.

Actuarial Funding Status

MPERS' funding objective is to meet future benefit obligations of retirees and beneficiaries through investment earnings and payroll contributions that remain approximately level from generation to generation. Historical information relating to this objective is presented in the "Schedule of Funding Progress" in this report's "Actuarial Section." During the fiscal year ending June 30, 2025, MPERS' funded status, which covers 19,155 participants, increased by 5.08% to 75.68%.

Each year, an independent actuarial firm conducts a valuation study to determine the actuarial soundness of the Plan based on its long-term obligations and the sufficiency of current contribution levels to fund the liabilities over a reasonable timeframe. In MPERS' most recent valuation, dated June 30, 2025, the actuary concluded that the System continues to be financed in accordance with actuarial standards using the level percent of payroll financing method. The actuary's conclusion is based upon the fact employers contribute to the System according to actuarially determined rates and presumes the continuation of payment of actuarially determined contributions. Additional information regarding the System's financial condition can be found in the "Actuarial Section" of this report.

To address the System's underfunding situation, the Board has modified the actuarial funding policies over the past 18 years. In June 2025, the Board amended the funding policy to continue propelling forward progress for both funding levels and contribution rates. As of June 30, 2025, the funding policy has a 14-year closed amortization period for unfunded liabilities.

On September 24, 2014, the Board adopted a Contribution Rate Stabilization Reserve Fund to reinforce further the aggressive funding policies noted in the policy above. The reserve fund is funded by maintaining employer contribution rates at present levels and applying investment gains to the reserve fund rather than decreasing employer contribution rates. When actuarial losses are experienced, the reserve fund is used first rather than increasing employer contribution rates. The reserve fund provides a smoothing of the overall experience, further decreasing the potential volatility of contributions for covered employers.

Investment Activities

State statutes and other applicable laws require the System's fiduciaries to make investments using the same care, skill, and diligence that prudent investors acting in a similar capacity would use. In fulfilling this obligation, the Board has established an investment policy to clearly define the roles and responsibilities of the Board, staff, and consultants and to ensure that System assets are invested in a diversified portfolio following prudent investment standards. The Board determines the Plan's broad asset allocation policies and return objectives. To implement and execute these policies, the Board has retained investment staff, consultants, a master custodian, and other advisors.

As of June 30, 2025, MPERS' investment portfolio had a total fair value of \$4.1 billion, representing a return of 12.7% for the fiscal year. Relative to MPERS' peer group, the InvestorForce Public Fund Universe, the 12.7% return for Fiscal Year 2025 ranked MPERS in the 8th percentile. The trailing three- and five-year performance of 11.6% and 13.6%, respectively, ranks MPERS in the 21st percentile and the top 1% of the peer group, respectively. The trailing 10- and 20-year performance of 9.5% and 8.3%, respectively, also ranks MPERS in the top 2% and 1% of the peer group for the periods.

Awards

The GFOA (Government Finance Officers Association) awarded a Certificate of Achievement for Excellence in Financial Reporting to MPERS for its Fiscal Year 2024 *Annual Report*. MPERS has achieved this prestigious award every year since Fiscal Year 2005. The Certificate of Achievement is the highest form of recognition for excellence in state and local government financial reporting. To be awarded a Certificate of Achievement, a government must publish an easily readable and efficiently organized *Annual Report*. This report must satisfy generally accepted accounting principles and applicable legal and GFOA reporting requirements.

A Certificate of Achievement is valid for one year. We believe that our current *Annual Report* continues to meet the program's requirements, and therefore, we are submitting this report to GFOA to determine its eligibility for another certificate.

MPERS also received the Public Pension Coordinating Council's (PPCC) Public Pension Standards Award in recognition of meeting professional standards for plan design and administration. The Council has presented this award to MPERS each year since 2004. The PPCC is a confederation of the National Association of State Retirement Administrators, the National Conference on Public Employee Retirement Systems, and the National Council on Teacher Retirement.

MPERS' staff and Board are pleased to receive these prestigious awards for financial and professional standards of excellence and may be viewed after this transmittal letter.

Acknowledgments and Distribution

This report, a product of the combined efforts of MPERS' staff and advisors, provides comprehensive and reliable information about the System, demonstrates compliance with legal provisions, and allows for the evaluation of responsible stewardship of the System's funds.

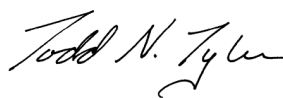
This report is provided to the governor, the state auditor, and the Joint Committee on Public Employee Retirement. It is also distributed electronically to all MoDOT divisions, district offices, and MSHP general and troop headquarters. These offices form the link between MPERS and its members, and their cooperation contributes significantly to the success of MPERS. We hope all readers of this report find it informative and valuable. An electronic version of this report is available on the MPERS website at www.mpers.org/annual-reports.

We express our gratitude to the members of the Board, the staff, the consultants, and the many people who have worked so diligently to ensure the continued successful operation of MPERS. The steady, monthly benefit payments offered by defined benefit plans, like MPERS, provide peace of mind and security for retirees and their families. For 70 years, MPERS has been committed to providing a foundation for financial security to plan participants through delivering quality benefits, exceptional member service, and professional plan administration.

Respectfully submitted,



Scott Simon
Executive Director



Todd Tyler
Board Chair



Government Finance Officers Association

Certificate of
Achievement
for Excellence
in Financial
Reporting

Presented to

**Missouri Department of Transportation & Highway
Patrol Employees' Retirement System**

For its Annual Comprehensive
Financial Report
For the Fiscal Year Ended

June 30, 2024

Christopher P. Morill

Executive Director/CEO



Public Pension Coordinating Council

***Public Pension Standards Award
For Funding and Administration
2024***

Presented to

MoDOT & Patrol Employees' Retirement System

In recognition of meeting professional standards for
plan funding and administration as
set forth in the Public Pension Standards.

Presented by the Public Pension Coordinating Council, a confederation of

National Association of State Retirement Administrators (NASRA)
National Conference on Public Employee Retirement Systems (NCPERS)
National Council on Teacher Retirement (NCTR)

A handwritten signature in cursive script, reading 'Alan H. Winkle'.

Alan H. Winkle
Program Administrator

Introductory Section | Board of Trustees

MPERS is governed by an eleven-member Board of Trustees, as set out in Section 104.160 of the Missouri Revised Statutes (RSMo.). Board members as of June 30, 2025:



Todd Tyler
Board Chair
MoDOT Employee
*Elected by
Active MoDOT Members*



Lt. Colonel Wallace Ahrens
Board Vice Chair
MSHP Employee
*Elected by
Active MSHP Members*



**Senator
Mike Bernskoetter**
State Senator
*Appointed by
President Pro-Tem of the
Senate*



W. Dustin Boatwright
Commissioner
*Missouri Highways and
Transportation Commission*



Sue Cox
MoDOT Retiree
*Elected by
Retired MoDOT Members*



Warren Erdman
Commissioner
*Missouri Highways and
Transportation Commission*



Ed Hassinger
Director of MoDOT
Ex-Officio Member



Daniel Hegeman
Commissioner
*Missouri Highways and
Transportation Commission*



**Representative
Barry Hovis**
State Representative
*Appointed by the
Speaker of the House*



Colonel Michael Turner
Superintendent of MSHP
Ex-Officio Member

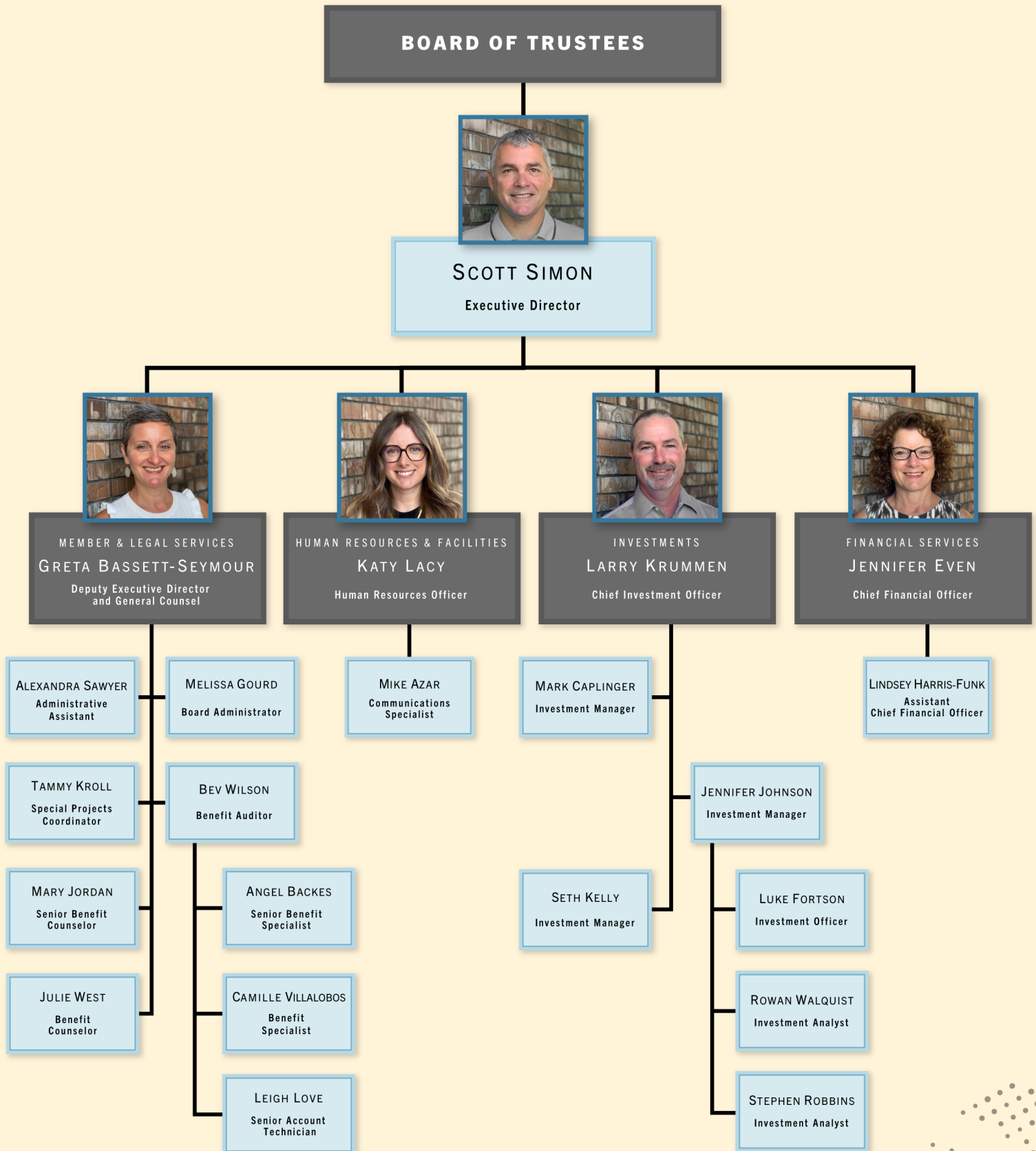


William "Bill" Seibert
MSHP Retiree
*Elected by
Retired MSHP Members*



Introductory Section | Administrative Organization

The executive director of MPERS has charge of the office and records of the System and hires employees as deemed necessary, subject to the approval of the Board of Trustees. The System employed 22 full-time staff as of June 30, 2025.



Introductory Section | Administrative Organization

Director's Office

The Director's Office staff provides executive oversight for the System which includes, but is not limited to, administrative support in the areas of legislation, stakeholder communications, operations, facilities management, human resources, benefits, risk management, and investments. The Director's Office is also responsible for providing the Board with results, information, and reports on the activities of the System.

Financial Services

The Financial Services section is responsible for maintaining all the financial records of MPERS. The Financial Services section interacts with the investment custodian, the auditors, the depository bank, the Missouri Department of Revenue, and the Internal Revenue Service. In addition, they assist the Investments section in tracking and predicting target cash balances, participate in annual budget development, prepare monthly budget-to-actual reports, and calculate monthly premium payments to the long-term disability insurer. The Financial Services section also processes MPERS' semi-monthly office payroll, reconciles monthly benefit payments and contributions/payrolls posted, and reconciles investment activity.

Investments

The Investments section staff works closely with the general investment consultant to manage the investment portfolio and provide consulting services to the Board and the executive director. This includes, but is not limited to, the following: (a) formulating investment policy and asset recommendations; (b) sourcing, selecting, monitoring, and evaluating external investment advisors; (c) measuring and reporting investment performance; (d) conducting market research on political, financial, and economic developments that may affect the System; and (e) serving as a liaison to the investment community.

Legal Services

The Legal Services section advises the executive director and Board on legal matters, reviews and approves investment and other contracts for MPERS, advises staff on the application of state and federal statutes affecting the administration of plan benefits, responds to requests from members and their attorneys related to plan benefits, engages in or oversees litigation affecting MPERS, and assists in developing policies, rules, and legislation impacting MPERS' operations or the administration of plan benefits.

Member Services

The Member Services section consists of two units devoted to serving member needs.

The Benefits Unit is responsible for contact with the membership regarding the benefit programs administered by MPERS, which include retirement and disability. The benefits staff is responsible for preparing and delivering the pre-retirement, mid-career, and benefit basics seminars in addition to assisting with the development of member communication material. The benefits staff is the main point of contact for members who have questions about retirement.

The Payroll Unit is responsible for establishing and maintaining all membership records including the following: (a) maintaining member data in the pension administration system; (b) verifying retirement calculations; (c) balancing payroll deductions; (d) verifying SAMII data against exception reports; and (e) entering payroll, service, and leave data into the System's database. Payroll Unit staff will also create and publish communication materials, assist with pre-retirement seminars, provide data to the actuary, and review member records for accuracy and completeness.

Introductory Section | Professional Services

The following firms were retained at fiscal year-end by the Board of Trustees to serve in professional capacities or provide consultant services. Please refer to pages 55 through 58 in the Investment Section for the Schedule of Investment Expenses and Brokerage Commissions for the investment professionals.

Actuary	Auditor	Investment General Consultant
Gabriel, Roeder, Smith & Company	Williams-Keepers, LLC	NEPC
Information Technology	Legislative Consultant	Master Trustee/Custodian
- Levi, Ray & Shoup, Inc. - Heartland Business Systems	Michael G. Winter Consultants, LLC	The Northern Trust Company
Risk Management/Insurance Consultant	Long-Term Disability Insurer	Governance Consultant
Charlesworth Benefits	The Standard Insurance Company	Funston Advisory Services, LLC
Investment Managers		
- ABRY Partners - Aisling Capital - American Infrastructure MLP - Anchorage Capital Group - Apollo Aviation Group - Ares Management - Arrowroot Capital - Banner Ridge Partners - Blackstone - Blackstone GSO - Blackstone Investment - Blue Owl Capital - Blue Road Capital - Carlyle Aviation Partners - CarVal Investors (CVI) - Catchmark Timber - CBRE Investors - CenterSquare Investment - CIM Group - Clarion Partners - Corrum Capital Management - DC Capital Partners - Drive Capital	- Energy & Minerals Group (EMG) - Fortress Investment Group - Francisco Partners - Grey Rock Energy Partners - Grove Street Advisors - Heartwood Partners - Kennedy Capital - KKR - KPS Capital Partners - Long Ridge Equity Partners - Longford Capital Management - Luxor Capital Group - Melange Capital Partners - Mercato Partners - MGG Investment Group - Miravast - Monomoy Capital Partners - Natural Gas Partners - New Mountain Capital - NISA - OCP Asia Limited - Octagon Credit Investors - OpenGate Capital	- Orion Mine Finance Group - Parametric - Pfingsten Partners - PIMCO Management - Principal Global Investors - Quantum Energy Partners - RCP Advisors - Ridgewood Energy - Riverstone Credit Partners - Sciens Capital - Sculptor Real Estate - Shore Capital Partners - Shoreline Capital - Silver Point Capital - Stockdale Capital Partners - Timberland Investment Resources - Torchlight Investors - TCG NewQuest - Tristan Capital Partners - Turnbridge Capital Partners - Varde Asia - Vectis

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FINANCIAL SECTION

Bridging Generations with Stewardship

Financial Foundations for the Long Haul

In 1955, Missouri's bridges were rising: steel and concrete structures built to carry the weight of generations to come. In the same year, the state laid another kind of foundation: a retirement system designed to support the financial well-being of its public servants for decades to come.

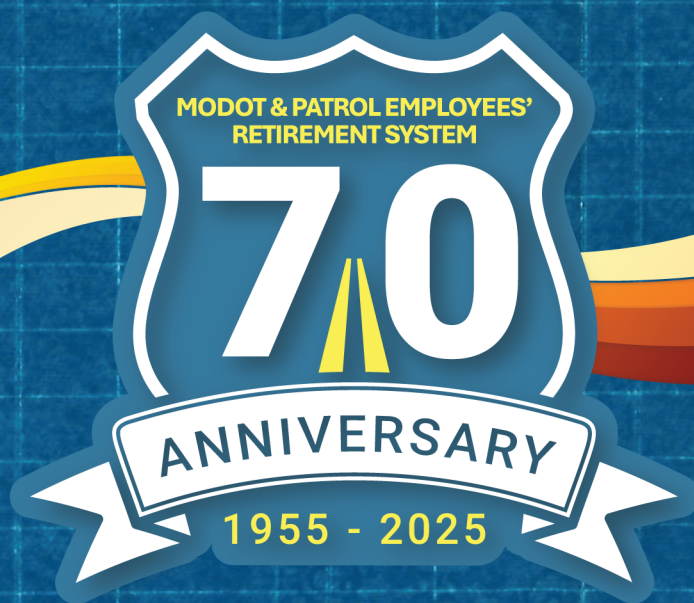
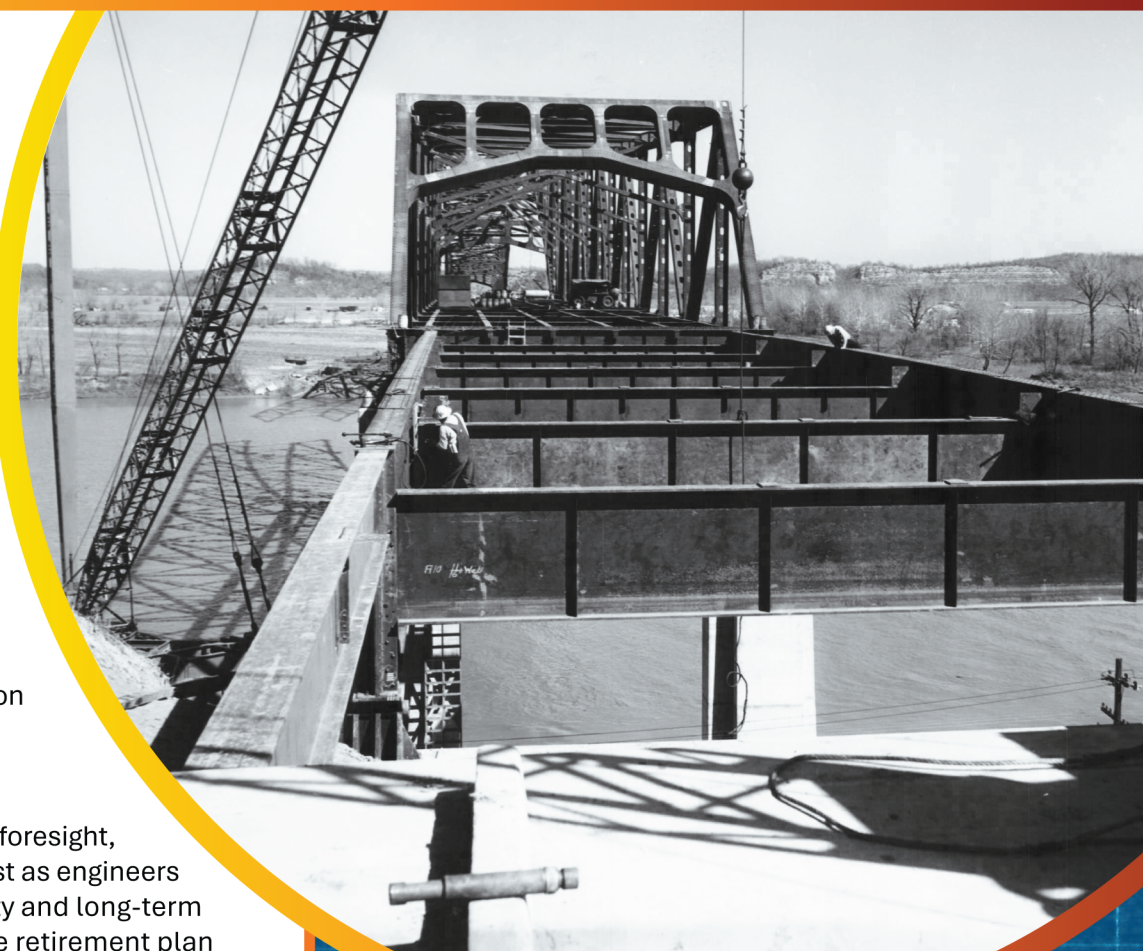
The image of bridge construction from the 1950s is more than symbolic. It reflects the same principles that guide financial management today: strength, foresight, and the ability to span time. Just as engineers calculate load-bearing capacity and long-term durability, the architects of the retirement plan designed a system that could withstand economic shifts and demographic changes.

From its inception, MPERS was funded through a balanced approach: employee contributions, matched by the state, and managed with care. Over the decades, that foundation has grown into a robust financial structure, one that continues to deliver on its promise.

Today, the System's financial health is the result of disciplined budgeting, prudent investment, and a commitment to transparency. Like the bridges built in 1955, it was made to last.

Image:

Bridge construction, 1955



INDEPENDENT AUDITOR'S REPORT

The Board of Trustees
Missouri Department of Transportation and
Highway Patrol Employees' Retirement System

Opinion

We have audited the statement of fiduciary net position of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (the System), as of June 30, 2025, and the related statement of changes in fiduciary net position for the year then ended, and the related notes to the financial statements, which collectively comprise the System's basic financial statements as listed in the table of contents.

In our opinion, the accompanying financial statements present fairly, in all material respects, the fiduciary net position of the System as of June 30, 2025, and the changes in fiduciary net position for the year then ended, in accordance with accounting principles generally accepted in the United States of America (GAAP).

Basis for Opinion

We conducted our audit in accordance with auditing standards generally accepted in the United States of America (GAAS). Our responsibilities under those standards are further described in the Auditor's Responsibilities for the Audit of the Financial Statements section of our report. We are required to be independent of the System and to meet our ethical responsibilities, in accordance with the relevant ethical requirements relating to our audit. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Financial Statements

Management is responsible for the preparation and fair presentation of the financial statements in accordance with GAAP, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, management is required to evaluate whether these are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for twelve months beyond the financial statement date, including any currently known information that may raise substantial doubt shortly thereafter.

Auditor's Responsibilities for the Audit of the Financial Statements

Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the financial statements.

In performing an audit in accordance with GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the System's internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about the System's ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control-related matters that we identified during the audit.

Required Supplementary Information

GAAP requires that the management's discussion and analysis and the schedules of changes in the employers' net pension liability, employers' contributions, investment returns, changes in net OPEB liability and related ratios, MPERS' proportionate share of net OPEB liability, and related notes be presented to supplement the basic financial statements. Such information is the responsibility of management and, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board, who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. We have applied certain limited procedures to the required supplementary information in accordance with GAAS, which consisted of inquiries of management about the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements, and other knowledge we obtained during our audit of the basic financial statements. We do not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance.

Supplementary Information

Our audit was conducted for the purpose of forming an opinion on the financial statements that collectively comprise the System's basic financial statements. The schedule of administrative expenses, schedule of investment expenses, and the schedule of consultant and professional expenses are presented for purposes of additional analysis and are not a required part of the basic financial statements. Such information is the responsibility of management and was derived from and relates directly to the underlying accounting and other records used to prepare the basic financial statements. The information has been subjected to the auditing procedures applied to the audit of the basic financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the basic financial statements or to the basic financial statements themselves, and other additional procedures in accordance with GAAS. In our opinion, the schedule of administrative expenses, the schedule of investment expenses, and the schedule of consultant and professional expenses are fairly stated, in all material respects, in relation to the basic financial statements as a whole.

Other Information

Management is responsible for the other information included in the annual comprehensive financial report. The other information comprises of the introductory, investments, actuarial, and statistical sections, but does not include the basic financial statements and our auditor's report thereon. Our opinion on the basic financial statements does not cover the other information, and we do not express an opinion or any form of assurance thereon. In connection with our audit of the basic financial statements, our responsibility is to read the other information and consider whether a material inconsistency exists between the other information and the basic financial statements, or the other information otherwise appears to be materially misstated. If, based on work performed, we conclude that an uncorrected material misstatement of the other information exists, we are required to describe it in our report.

Williams - Keepers LLC

Columbia, Missouri
November 5, 2025

The management of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (the System, or MPERS) provides this discussion and analysis of the System's financial performance for the fiscal year ended June 30, 2025. While this discussion is intended to summarize the financial status of MPERS, readers should consider this information in conjunction with the information that is furnished in the more detailed financial statements and corresponding notes.

DESCRIPTION OF BASIC FINANCIAL STATEMENTS

As required by the Governmental Accounting Standards Board (GASB) accounting standards, this financial report consists of Management's Discussion and Analysis (this section), the basic financial statements (including notes to the basic financial statements), and other required supplementary information.

Financial Statements report information about MPERS, using accounting methods similar to those used by private-sector companies, by using the economic resources measurement focus and accrual basis of accounting. These statements provide both long-term and short-term information about the System's overall financial status. These statements follow this Management's Discussion and Analysis section:

- The *Statement of Fiduciary Net Position* includes all the System's assets and deferred outflows of resources, and liabilities and deferred inflows of resources, with the difference reported as net position.
- The *Statement of Changes in Fiduciary Net Position* accounts for all the current year's additions (income) and deductions (expenses), regardless of when cash is received or paid.

Notes to the Financial Statements are included following the financial statements. The notes to the financial statements provide additional information that is essential for a full understanding of the data provided in the financial statements.

Required Supplementary Information follows the notes and further supports the information in the financial statements.

Supplementary Information follows the required supplementary information and provides additional detailed administrative and investment expense information.

ANALYSIS OF FINANCIAL POSITION AND RESULTS OF OPERATIONS

Overall, the financial position of MPERS increased by \$410.8 million, reported as the "net increase". This is primarily a result of the increase in the fair value of investments for the year ended June 30, 2025. The funded status of the plan showed an increase of 5.08%, primarily due to positive investment returns.

The following schedules present summarized comparative data from the System's financial statements for each of the fiscal years ended June 30, 2025 and 2024. Following each schedule is a brief summary providing explanation and analyses of the major reasons for changes in the condensed financial statements.

Summarized Comparative Statements of Fiduciary Net Position

	June 30, 2025	June 30, 2024	% Change 2025 / 2024
Cash and Receivables	\$ 22,828,702	\$ 23,387,102	(2.4)
Investment Sales Receivables	48,925,514	7,877,386	521.1
Investments	4,101,436,130	3,658,217,662	12.1
Invested Securities Lending Collateral	27,346,939	21,142,145	29.3
Capital Assets	4,999,787	526,358	849.9
Total Assets	4,205,537,072	3,711,150,653	13.3
Deferred Outflows of Resources	190,780	288,727	(33.9)
Accounts Payable	2,342,999	2,146,932	9.1
Investment Purchases Payable	85,073,939	7,714,394	1,002.8
OPEB Obligation	843,082	837,636	0.7
Securities Lending Collateral	27,929,162	21,725,160	28.6
Total Liabilities	116,189,182	32,424,122	258.3
Deferred Inflows of Resources	1,073,664	1,357,751	(20.9)
Net Position Restricted for Pensions	<u>\$ 4,088,465,006</u>	<u>\$ 3,677,657,507</u>	11.2

The increase in cash and receivables is primarily attributable to an increase of investment sales receivable as of June 30, 2025. Fluctuations in this area are normal, based on investment activity.

The System's investments represent the main component of total assets. These investments include equities, fixed income, limited partnerships, hedge funds, and short-term investments. The increase in fair value of investments as of June 30, 2025, is a result of the positive investment performance during the fiscal year. The fiscal year 2025 investment return was 12.71% as calculated on a time-weighted rate of return methodology.

Capital assets increased in fiscal year 2025 with the purchase of a different building for MPERS' office.

Deferred outflows of resources are related to Other Post-Employment Benefits (OPEB), required by Governmental Accounting Standards Board (GASB) Statement 75. The deferred outflows of resources relate to the timing of contributions paid and changes in assumptions.

The liabilities in fiscal year 2025 consist of accounts payable, OPEB obligation, and Securities Lending Collateral. The increase in accounts payable for fiscal year 2025 is attributable to higher investment purchases payable. Fluctuations in this area are normal, based on investment activity. The next largest component of liabilities is securities lending collateral. This represents the amount owed for collateral to be returned as the result of investment securities lent. The corresponding securities lending collateral asset is valued at a lower amount than the securities lending collateral liability due to the fair value of the securities on loan being less than the collateral value.

Deferred inflows of resources are related to OPEB. The deferred inflows of resources relate primarily to the amortization of changes in actuarial assumptions.

The System's net position restricted for pensions was \$4.088 billion as of June 30, 2025, a \$410.8 million increase from the \$3.678 billion net position as of June 30, 2024.

Summarized Comparative Statements of Changes in Fiduciary Net Position

	Year Ended June 30, 2025	Year Ended June 30, 2024	% Change 2025 / 2024
Contributions	\$ 267,193,851	\$ 270,240,170	(1.1)
Net Investment Income	460,643,075	432,121,321	6.6
Other Income	391	179	118.4
Total Additions	727,837,317	702,361,670	3.6
Benefits	310,871,680	300,081,057	3.6
Administrative Expenses	6,158,138	6,250,950	(1.5)
Total Deductions	317,029,818	306,332,007	3.5
Net Increase	410,807,499	396,029,663	3.7
Net Position-Beginning	3,677,657,507	3,281,627,844	12.1
Net Position-Ending	\$ 4,088,465,006	\$ 3,677,657,507	11.2

Net investment income, a primary component of plan additions, was \$460.6 million for fiscal year 2025, which represented a 12.71% rate of return for the fiscal year ended June 30, 2025. In comparison, the fiscal year 2024 income of \$432.1 million represented an investment return of 13.29%. Annual fluctuations within the broad investment markets are outside the control of the System and are expected to fluctuate from year to year. Fiscal year 2025 was a good year as MPERS outperformed its policy index by 2.0%, building on the positive fiscal year 2024 investment return of 13.29% which outperformed the policy index by 1.0%. The Board of Trustees has approved a diversified asset allocation that, over long periods of time, is expected to realize the assumed actuarial rate of investment return of 6.50%.

Total benefits increased in fiscal year 2025 by \$10.8 million from fiscal year 2024 due to the normal annual cost-of-living adjustment (COLA) and an increase in the total number of retirees.

The decrease in fiscal year 2025 administrative expenses is due to a decrease in professional services expense and a lower contribution rate for the employer share of retirement cost.

CURRENTLY KNOWN FACTS AND RECENT EVENTS

Based on the June 30, 2025 actuarial valuation, the Board of Trustees approved a decrease to the required state contribution rate for non-uniformed payroll (MoDOT, civilian patrol, and MPERS) to 32.979%, effective July 1, 2026. The rate approved for uniformed patrol decreases to 58.000%.

Based on the June 30, 2024 actuarial valuation, the Board of Trustees approved a decrease to the required state contribution rate for non-uniformed payroll (MoDOT, civilian patrol, and MPERS) to 37.013%, effective July 1, 2025. The rate approved for uniformed patrol increased to 58.005%.

CONTACTING THE RETIREMENT SYSTEM'S MANAGEMENT

This financial report is designed to provide a general overview of the System's finances. Questions about this report or requests for additional financial information should be sent to:

MoDOT and Patrol Employees' Retirement System
813 W Stadium Blvd
Jefferson City, MO 65109
mpers@mpers.org

Statement of Fiduciary Net Position

As of June 30, 2025

ASSETS:

Cash	\$ 632,980
Receivables	
Contributions	11,098,885
Accrued Interest and Income	10,966,902
Investment Sales	48,925,514
Other	129,935
Total Receivables	71,121,236

Investments, at Fair Value

Equities	246,174,343
Fixed Income	1,568,689,796
Limited Partnerships	1,800,584,977
Hedge Funds	33,292,029
Short-Term Investments	452,694,985
Total Investments	4,101,436,130

Invested Securities Lending Collateral	27,346,939
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Capital Assets, net of Depreciation

Land	188,319
Building and Improvements	795,778
Furniture, Equipment and Software	3,469,737
Construction in Progress	4,467,401
Accumulated Depreciation	(3,921,448)
Capital Assets, net of Depreciation	4,999,787

TOTAL ASSETS **\$ 4,205,537,072**

DEFERRED OUTFLOWS OF RESOURCES **\$ 190,780**

LIABILITIES:

Accounts Payable	\$ 2,342,999
OPEB Obligation	843,082
Security Lending Collateral	27,929,162
Investment Purchases	85,073,939

TOTAL LIABILITIES **\$ 116,189,182**

DEFERRED INFLOWS OF RESOURCES **\$ 1,073,664**

NET POSITION RESTRICTED FOR PENSIONS **\$ 4,088,465,006**

See accompanying Notes to the Financial Statements.

Statement of Changes in Fiduciary Net Position

For the Year Ended June 30, 2025

ADDITIONS:

Contributions	
Employer	\$ 252,427,148
Employee	9,771,317
Service Transfers from Other System	4,535,584
Other	459,802
Total Contributions	<u>267,193,851</u>
Investment Income from Investing Activities	
Net Appreciation in Fair Value of Investments	360,638,350
Interest and Dividends	137,042,421
Investment Expenses	(37,171,522)
Net Investment Gain	<u>460,509,249</u>
Income from Securities Lending Activities	
Securities Lending Gross Income	1,451,360
Securities Lending Expenses, net	(1,317,534)
Net Income from Securities Lending Activities	<u>133,826</u>
Other Income	<u>391</u>
TOTAL ADDITIONS	\$ 727,837,317

DEDUCTIONS:

Benefit Expenses	
Retiree and Survivor Annuity Benefits	\$ 291,751,917
BackDROP Payments	12,206,197
Disability Benefits	2,827,749
Death Benefits	1,082,500
Service Transfer Payments	1,879,934
Employee Contribution Refunds	1,123,383
Total Benefits Expenses	<u>310,871,680</u>
Administrative Expenses	<u>6,158,138</u>
TOTAL DEDUCTIONS	\$ 317,029,818
NET INCREASE	\$ 410,807,499
NET POSITION RESTRICTED FOR PENSIONS	
Beginning of Year	<u>\$3,677,657,507</u>
End of Year	<u><u>\$4,088,465,006</u></u>

See accompanying Notes to the Financial Statements.

NOTE 1 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

As established under Section 104.020 of the Revised Statutes of Missouri (RSMo.), the Missouri Department of Transportation and Highway Patrol Employees’ Retirement System (MPERS) is a body corporate and an instrumentality of the State of Missouri (State). Due to the nature of MPERS’ reliance on funding from the Missouri Department of Transportation (MoDOT) and the Missouri State Highway Patrol (MSHP) and control of the overall plan document by the legislative and executive branches of state government, MPERS is considered a part of the State of Missouri financial reporting entity and is included in the State’s financial reports as a component unit shown as a pension trust fund.

Note 1 (a) - Basis of Accounting

The financial statements were prepared using the full accrual basis of accounting. Contributions are due to MPERS when employee services have been performed. Contributions are recognized as revenues when due, pursuant to statutory requirements. Benefits are recognized when due and payable and expenses are recorded when the corresponding obligations are incurred. Dividend income is recognized when dividends are declared. Interest income is recognized when earned.

Note 1 (b) - Method Used to Value Investments

Investments are reported at fair value on a trade date basis. Bonds and stocks traded on a national or international exchange are valued at the reported sales price at current exchange rates. Mortgages are valued on the basis of future principal and interest payments and are discounted at prevailing interest rates for similar instruments. The fair value of real estate and timber investments are based on net asset value estimates provided by the general partners’ administrators or portfolio managers, which are compared to independent appraisals. Investments that do not have an established market are reported at estimated fair value. The fair value of the hedge fund portfolios and partnership portfolios are based on valuations of the underlying assets as reported by the general partner or portfolio manager.

Note 1 (c) - Net Investment in Capital Assets

MPERS capitalizes assets with an expected useful life greater than one year and a cost greater than \$5,000. Capital assets are depreciated on the straight-line method over the estimated useful lives of the related assets. The estimated useful lives are as follows:

Furniture, Equipment and Software	3-10 years
Building and Improvements	30 years

Note 1 (d) - Use of Estimates

The preparation of financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the financial statements, and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from those estimates.

NOTE 2 – PLAN DESCRIPTIONS AND CONTRIBUTION INFORMATION

MPERS is a body corporate and an instrumentality of the state as a multiple-employer, public employee retirement system with one plan that has three benefit structures known as the Closed Plan, the Year 2000 Plan, and the Year 2000 Plan-2011 Tier. The plan provides retirement, survivor, and disability benefits for employees of MoDOT, MSHP, and MPERS. The plan is administered in accordance with the requirements of a cost sharing, multiple-employer, public employee retirement plan under the Revised Statutes of Missouri. In MPERS are vested the powers and duties specified in sections 104.010 to 104.312, 104.601 to 104.805, and 104.1003 to 104.1093, RSMo., and such other powers as may be necessary or proper to enable it, its officers, employees, and agents to carry out fully and effectively all the purposes outlined pursuant to these sections. Responsibility for the operation and administration of the System is vested in the Board of Trustees, which consists of eleven members, four elected by the active and retired plan members, three Highway and Transportation Commissioners, a State Senator appointed by the President Pro Tempore of the Senate, a State Representative appointed by the Speaker of the House, and the MoDOT Director and MSHP Superintendent who serve as ex-officio members. Detailed information regarding contributions can be found in Note 5.

Generally, all covered employees hired before July 1, 2000, are eligible for membership in the Closed Plan. All covered employees hired on or after July 1, 2000, and before January 1, 2011, are eligible for membership in the Year 2000 Plan. All covered employees hired on or after January 1, 2011, are eligible for membership in the Year 2000 Plan's 2011 Tier.

<i>Membership in the Closed Plan, Year 2000 Plan, and 2011 Tier as of June 30, 2025</i>				
	Closed	Year 2000	Tier 2011	Total
Retirees, Beneficiaries, and Disabilities Currently Receiving Benefits	4,668	5,142	128	9,938
Terminated Employees Entitled to But Not Yet Receiving Benefits	691	1,016	499	2,206
Active Employees				
Vested	928	1,725	1,914	4,567
Non-Vested	3	48	2,393	2,444
Total Membership	<u>6,290</u>	<u>7,931</u>	<u>4,934</u>	<u>19,155</u>

Closed Plan Description

Employees covered by the Closed Plan are fully vested for benefits upon receiving 5 years of creditable service. Under the Closed Plan, MoDOT and civilian employees may retire with full benefits upon the earliest of attaining:

- Age 65 with 4 or more years of creditable service (active);
- Age 65 with 5 or more years of creditable service (terminated & vested);
- Age 60 with 15 or more years of creditable service (active or terminated & vested); or
- "Rule of 80" – at least age 48 with sum of member's age and service equaling 80 or more (active or terminated & vested).

The following provisions apply for uniformed patrol members of the Closed Plan:

- Age 55 with 4 or more years of creditable service (active);
- Age 55 with 5 or more years of creditable service (terminated & vested);
- "Rule of 80" – at least age 48 with sum of member's age and service equaling 80 or more (active or terminated & vested); or
- Mandatory retirement at age 60 (active).

All non-uniformed members may retire early, with reduced benefits, at age 55 with at least 10 years of creditable service.

The base benefit in the Closed Plan is equal to 1.6% multiplied by the final average pay multiplied by years of creditable service. For members of the uniformed patrol, the base benefit is calculated by applying the same formula, then multiplying the product by 1.333333.

Retired uniformed members will receive an additional benefit of \$90 per month, plus cost-of-living adjustments (COLAs), until attainment of age 65. This payment, however, is reduced by any amount earned during gainful employment. This benefit is not available to uniformed members hired on or after January 1, 1995, or to vested deferred members.

For members employed prior to August 28, 1997, COLAs are provided annually based on 80% of the increase in the consumer price index for all urban consumers for the United States (CPI-U). The minimum rate is 4% and the maximum rate is 5%, until the cumulative amount of COLAs equals 65% of the original benefit. Thereafter, the 4% minimum rate is eliminated, and the annual COLA rate will be equal to 80% of the increase in the CPI-U (annual maximum of 5%). For members employed on or after August 28, 1997, COLAs are provided annually based on 80% of the increase in the CPI-U, up to a maximum rate of 5%.

The BackDROP is a payment option that is available to eligible members upon retirement. This option provides for a benefit to be calculated as if the member elected to retire at a previous date. If the BackDROP is elected, the monthly benefit payable on the actual retirement date is based on the benefit that would have been received by the member had he/she left employment and retired on the BackDROP date. In addition, the member will receive a lump sum payment equal to 90% of the life income annuity amount the member would have received during the BackDROP period. This lump sum amount includes any COLAs and other benefit increases; also, credit will be received for the unused sick leave balance as of the date of retirement.

The life income annuity payment option (which contains no provision for survivorship) and the life income with 60 or 120 month guaranteed payment options are available to all members. Joint and 50% or 100% survivor options are available if married at the time of retirement. In the Closed Plan, the reduction for the joint & 100% survivor option is based on the difference between the age of the member and the survivor. There is no reduction for the joint and 50% survivor option.

If a reduced joint and survivor option is chosen at the time of retirement and the spouse precedes the member in death, the benefit will revert back (pop-up) to a normal annuity, upon appropriate notification to MPERS.

Members may name a new spouse as beneficiary if:

- They were single at retirement and since married;
- They elected a spouse option at the time of retirement, the spouse preceded the member in death, and then a remarriage occurred.

The member has 1 year from the date of marriage to re-elect a payment option and name a new spouse.

All members who retire from active employment or long-term disability, or begin receiving normal or work-related disability benefits, on or after September 28, 1985, are provided a \$5,000 death benefit payable to designated beneficiaries.

Year 2000 Plan Description

Employees covered by the Year 2000 Plan are fully vested for benefits upon earning 5 years of creditable service. Under the Year 2000 Plan, MoDOT and civilian employees may retire with full benefits upon the earliest of attaining:

- Age 62 and with 5 or more years of creditable service (active or terminated & vested);
- “Rule of 80” – at least age 48 with sum of member’s age and service equaling 80 or more (active).

The following provisions apply for uniformed patrol members of the Year 2000 Plan:

- “Rule of 80” – at least age 48 with sum of member’s age and service equaling 80 or more (active);
- Mandatory retirement at age 60 (active only).

All members may retire early with reduced benefits at age 57 with at least 5 years of creditable service.

The base benefit in the Year 2000 Plan is equal to 1.7% multiplied by the final average pay multiplied by years of creditable service. Members retiring under the Rule of 80, and uniform patrol members retiring at the mandatory retirement age (currently 60), receive an additional temporary benefit until age 62. The temporary benefit is equivalent to 0.8% multiplied by final average pay multiplied by years of creditable service.

COLAs are provided annually based on 80% of the increase in the CPI-U, up to a maximum rate of 5%.

The BackDROP is a payment option that may be available to members upon retirement. This option provides for a monthly benefit to be calculated as if the member elected to retire at a previous date. If the BackDROP is elected, the monthly benefit payable on the actual retirement date is based on the benefit that would have been received by the member had he/she left employment and retired on the BackDROP date. In addition, the member will receive a lump sum payment equal to 90% of the life income annuity amount the member would have received during the BackDROP period. This lump sum amount includes any temporary benefits, COLAs, and other benefit increases; also, credit will be received for the unused sick leave balance as of the date of retirement.

The life income annuity payment option (with no provision for survivorship) and the life income with 120 or 180 months guaranteed payment options are available to all members. Joint and 50% or 100% survivorship options are available if married at the time of retirement. The reduction for the joint and 50% or 100% survivor options is based on the member’s age at retirement, as well as the age difference between the member and the survivor.

If a reduced joint and survivor option is chosen at the time of retirement and the spouse precedes the member in death, the benefit will revert back (pop-up) to a normal annuity, upon appropriate notification to MPERS.

Members may name a new spouse for survivor benefits if:

- They were single at retirement and since married;
- They elected a spouse option at the time of retirement, the spouse preceded the member in death, and then a remarriage occurred.

The member has 1 year from the date of marriage to re-elect the payment option and name a new spouse.

All members who retire from active employment or long-term disability, or begin receiving work-related disability benefits, on or after July 1, 2000, are provided a \$5,000 death benefit payable to designated beneficiaries.

Year 2000 Plan-2011 Tier Description

Employees covered by the 2011 Tier are fully vested for benefits upon earning 5 years of creditable service if they were active on or after January 1, 2018. Under the 2011 Tier, MoDOT and civilian employees may retire with full benefits upon the earliest of attaining:

- Age 67 and with 5 or more years of creditable service (active or terminated & vested);
- “Rule of 90” – at least age 55 with sum of member’s age and service equaling 90 or more (active only).

Active MoDOT and civilian employees may retire early with reduced benefits at age 62 with at least 5 years of creditable service. The following provisions apply for uniformed patrol members of the 2011 Tier:

- Age 55 and with 5 or more years of creditable service (active only);
- Mandatory retirement at age 60 with no minimum service amount (active only).

Terminated and vested uniformed patrol employees may retire at age 67 with 5 or more years of creditable service.

The base benefit in the 2011 Tier is equal to 1.7% multiplied by the final average pay multiplied by years of creditable service. Members retiring under the Rule of 90, and uniform patrol members retiring at the mandatory retirement age (currently 60) or at age 55 with 5 years of creditable service, receive an additional temporary benefit until age 62. The temporary benefit is equivalent to 0.8% multiplied by final average pay multiplied by years of creditable service.

COLAs are provided annually based on 80% of the change in the CPI-U, up to a maximum rate of 5%.

The life income annuity payment option (with no provision for survivorship) and the life income with 120 or 180 months guaranteed payment options are available to all members. Joint and 50% or 100% survivorship options are available if married at the time of retirement. The reduction for the joint and 50% or 100% survivor options is based on the member’s age at retirement, as well as the age difference between the member and the survivor.

If a reduced joint and survivor option is chosen at the time of retirement and the spouse precedes the member in death, the benefit will revert back (pop-up) to a normal annuity, upon appropriate notification to MPERS.

Members may name a new spouse for survivor benefits if:

- They were single at retirement and since married;
- They elected a spouse option at the time of retirement, the spouse preceded the member in death, and then a remarriage occurred.

The member has 1 year from the date of marriage to re-elect the payment option and name a new spouse.

All members who retire from active employment or long-term disability, or begin receiving work-related disability benefits, on or after January 1, 2011, are provided a \$5,000 death benefit payable to designated beneficiaries.

Contributions

Beginning January 1, 2011, employee contributions of 4% of gross pay are required for those covered by the Year 2000 Plan-2011 Tier.

Employer contributions are determined through annual actuarial valuations. Administrative expenses are financed through contributions from participating employers and investment earnings.

Participating employers are required to make contributions to the plan based on the actuarially determined rate. Detailed information regarding contributions can be found in Note 5.

NOTE 3 – DEPOSITS AND INVESTMENTS

The Board of Trustees has established policies and procedures by which funds are invested. Section 104.150, RSMo., provides the authority for the Board to invest MPERS funds. Plan assets are invested in a diversified portfolio following prudent standards for preservation of capital, with the goal of achieving the highest possible rate of return consistent with MPERS' tolerance for risk. The Board of Trustees establishes MPERS' asset allocation policy and may amend the policy. The following is MPERS' current asset allocation policy:

Asset Class	Target Allocation
Public Equity	40.0%
Private Equity	10.0%
Traditional Fixed Income	22.5%
Opportunistic Debt	7.5%
Real Assets	10.0%
Real Estate	10.0%
Cash	0.0%

Note 3 (a) - Deposit and Investment Risk Policies

Concentration of Credit Risk

Concentration of credit risk is the risk of loss attributed to the magnitude of the System's investment in a single issuer. Within the traditional asset classes (equities and fixed income), the consultant will aggregate exposures across asset classes to create measures of concentration including industries, countries, and security issuer for Investment staff review.

Investment Custodial Credit Risk

Custodial credit risk is an investment risk that, in the event of the failure of the counterparty to a transaction, the System will not be able to recover the value of its investment or the collateral securities that are in the possession of an outside party. Investment securities are exposed to custodial credit risk if the securities are uninsured, are not registered in the name of the System, and are held by either: a) the counterparty or b) the counterparty's trust department or agent but not in the System's name. It is the policy of the System to require that all investments be clearly marked as to ownership and, to the extent possible, shall be registered in the name of the System.

Cash Deposit Custodial Credit Risk

Cash deposit custodial credit risk is the risk that, in the event of the failure of depository financial institution, the System will not be able to recover deposits or will not be able to recover collateral securities that are in the possession of an outside party. Missouri state law requires that all public funds must be collateralized with acceptable securities having fair values of at least 100% of the amount of funds on deposit (less any amount covered by FDIC insurance).

Market Risk

Market risk is the risk that the fair value of an investment will be adversely impacted due to a change in value of the underlying market. The three primary market risks prevalent in the System's investment portfolio are equity prices, interest rates, and foreign currencies. Equity risk is the risk that stock prices fall and/or the volatility in the equity market increases. Interest rate risk is the risk that fixed income securities (or any investment primarily valued on a yield basis) will drop in value due to an increase in interest rates. Currency risk is the risk that changes to foreign exchange rates will adversely impact the fair value of non-U.S. Dollar denominated assets. The System protects the portfolio against market risks by adopting a diversified asset allocation that limits the amount of exposure to each underlying market risk. Market risks are also controlled by monitoring the types, amounts, and degree of risk that each investment manager takes for their specific mandate.

Investment Credit Risk

Investment credit risk is the risk that an issuer or other counterparty to an investment will not fulfill its obligations. Unless authorized under a separate Investment Management Agreement or operating agreement, it is the policy of the System to limit fixed income managers to purchasing securities that possess a minimum credit rating of "Baa" by Moody's and "BBB" by Standard & Poor's. Issues subsequently downgraded below these ratings must be brought to the attention of the Chief Investment Officer.

Where counterparty risk is present, the System's investment managers seek to control credit risk through counterparty credit evaluations and approvals, counterparty credit limits and exposure monitoring procedures.

Note 3 (b) - Cash Deposits

Cash balances include short-term securities held by the custodial bank to meet future obligations and operating balances held by the depository bank. As of June 30, 2025, MPERS had a carrying amount of deposits of \$632,980, and a bank balance of \$732,780. The FDIC covered \$250,000 of the bank balance with the remaining balance being fully collateralized.

Note 3 (c) – Concentrations

No investments in any one organization (other than those issued or sponsored by the U.S. government and those in pooled investments) represent 5% of plan net position.

Note 3 (d) – Rate of Return

For the year ended June 30, 2025, the annual money-weighted rate of return on pension plan investments, net of pension plan investment expense, was 12.71%. The money-weighted rate of return expresses investment performance, net of investment expense, adjusted for the changing amounts actually invested.

Note 3 (e) – Investments

The following table shows MPERS' investments by type.

Summary of Investments by Type as of June 30, 2025

	Amount	Value
Equities	\$ 203,756,792	\$ 246,174,343
Fixed Income	1,558,159,906	1,568,689,796
Limited Partnerships	1,543,096,488	1,800,584,977
Hedge Funds	17,576,542	33,292,029
Short Term Securities	452,589,673	452,694,985
Securities Lending Collateral	27,346,939	27,346,939
Total Investments	<u>\$ 3,802,526,340</u>	<u>\$ 4,128,783,069</u>

Reconciliation to Statement of Fiduciary Net Position:

Less: Securities Lending Collateral	(27,346,939)
Investments per Statement of Fiduciary Net Position	<u>\$ 4,101,436,130</u>

Certain investments are not listed on either national exchanges or over-the-counter markets, nor do they have quoted market prices. Their valuation is based on the most current net asset values, independent appraisals, and/or good faith estimates of the investment's fair value provided by the general partner or portfolio manager, cash flow adjusted through fiscal year end. The estimated fair value of these investments may differ significantly from values that would have been used had a ready market existed. The following investments were priced using those methods and comprised 44.71% of the total fair value of the System's investments as of June 30, 2025:

	Fair Value
Hedge Funds	\$ 33,292,029
Limited Partnerships	1,800,584,977
	<u>\$1,833,877,006</u>

Note 3 (f) – Fair Value Measurements

MPERS categorizes its fair value measurements within the fair value hierarchy established by generally accepted accounting principles. The hierarchy is based on the valuation inputs used to measure the fair value of the asset and give the highest priority to unadjusted quoted prices in active markets for identical assets or liabilities (level 1 measurements) and the lowest priority to unobservable inputs (level 3 measurements).

Level 1: Unadjusted quoted prices for identical instruments in active markets.

Level 2: Quoted prices for similar instruments in active markets; quoted prices for identical or similar instruments in markets that are not active; and model-derived valuations in which all significant inputs are observable.

Level 3: Values derived from valuation techniques in which significant inputs are unobservable. Investments that are measured at fair value using the net asset value per share

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Investments Measured at Fair Value, June 30, 2025

Investments by Fair Value Level	Fair Value	Level 1	Level 2	Level 3
Short Term Securities	\$ 410,103,304	\$ 410,103,304	\$ —	\$ —
Debt Securities				
Collateralized Debt Obligations	345,742,614	—	159,317,419	186,425,195
Commercial Mortgage-Backed Securities	127,284,562	—	108,759,847	18,524,715
Corporate Bonds	11,870,557	—	11,670,619	199,938
Funds – Corporate Bonds	9,268,083	9,268,083	—	—
Government Mortgage-Backed Securities	724,461,452	—	301,944,208	422,517,244
Municipal Bonds	176,765,168	—	175,702,559	1,062,609
Non-U.S. Treasuries	650,078	—	650,078	—
U.S. Government Agencies	57,703,646	—	56,738,890	964,756
U.S. Treasury Securities	102,024,363	—	102,024,363	—
Total Debt Securities	1,555,770,523	9,268,083	916,807,983	629,694,457
Equity Securities				
Communication Services	169,316	169,316	—	—
Consumer Discretionary	3,708,874	3,708,874	—	—
Consumer Staples	3,641,039	3,641,039	—	—
Energy	2,053,001	2,053,001	—	—
Financials	108,362,741	108,362,741	—	—
Health Care	13,036,750	13,036,750	—	—
Industrials	16,319,638	16,319,638	—	—
Information Technology	5,669,272	5,669,272	—	—
Materials	2,825,353	2,825,353	—	—
Real Estate	2,805,515	2,805,515	—	—
Utilities	667,813	667,813	—	—
Total Equity Securities	159,259,312	159,259,312	—	—
Private Markets				
Opportunistic Debt	365,275,434	34,409,805	22,155,567	308,710,062
Private Equity	422,914,847	(157,500)	—	423,072,347
Real Assets	446,394,219	19,620,614	—	426,773,605
Real Estate	326,174,910	10,184,865	—	315,990,045
Total Private Markets	1,560,759,410	64,057,784	22,155,567	1,474,546,059
Investment Derivative Instruments				
Swaps	18,946,620	—	18,946,620	—
Total Investment Derivative Instruments	18,946,620	—	18,946,620	—
Total Investment by Fair Value Level	\$3,704,839,169	\$ 642,688,483	\$ 957,910,170	\$2,104,240,516

Investments Measured at Net Asset Value

In-Liquidation	419,023
Multi-Strategy	270,316,379
Opportunistic Debt	44,838,161
Private Real Estate Fund	55,841,875
Total Investments Measured at Net Asset Value	371,415,438
Total Investments	\$4,076,254,607

Reconciliation to Statement of Fiduciary Net Position

Total Investments Measured at Fair Value and Derivatives	\$ 4,076,254,607
Investment Sales Receivable	(48,925,514)
Investment Purchases Payable	85,073,939
Accrued Interest and Income	(10,966,902)
Total Investments per Statement of Fiduciary Net	\$4,101,436,130

Investments listed as level 1 include securities and futures contracts where the price comes from an exchange.

Investments listed as level 2 include securities where an independent pricing evaluator had direct observable information including: trading volume, multiple sources of market data and benchmark spreads. The equity index swap is included because the valuation inputs include an observable interest rate and the underlying index.

Investments listed as level 3 include securities where an independent pricing evaluator did not have direct observable information and had limited market information for comparable securities. Significant inputs used in the valuation are not available aside from the evaluator providing the price. Direct investments in private equity, real estate, credit, and real assets are included because the valuation techniques utilize discounted cash flows or other non-observable market information by manager.

<i>Private Markets Measured at Fair Value as of June 30, 2025</i>		
Private Markets	Fair Value	Unfunded Commitments
Private Equity	\$ 422,914,847	\$ 213,182,248
Real Estate	326,174,910	160,866,460
Real Assets	446,394,219	68,911,160
Opportunistic Debt	365,275,434	257,784,870
Total Private Markets	\$ 1,560,759,410	\$ 700,744,738

Private Markets

Private equity, real estate, real assets, and opportunistic debt are the four asset classes that fall into the category of private market funds. These funds invest in the equity or debt of private companies.

Private Equity: The private equity portfolio includes 33 direct fund investments and four fund of funds investments. These funds mostly invest in private companies adding value through operational or industry expertise and vast networks. The majority of the private equity allocation is in buyout funds with a smaller portion in venture capital and growth equity funds. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of six to ten years.

Real Estate: The real estate portfolio consists of 21 real estate funds. The non-core real estate book includes 19 real estate funds that invest in value-add or opportunistic strategies. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of six to ten years. The remaining two investments are in core real estate funds. Both funds are open-ended and eligible for redemption on a quarterly basis.

Real Assets: The real asset portfolio contains 29 funds that invest in private energy, aviation, mining, and shipping companies. The timber portfolio, which includes both ownership in timber funds and direct timber investments, is also within the real assets portfolio. The timber portfolio has 11 direct timber investments. These funds and investments are not eligible for redemption. Distributions are received as underlying investments and investments within the funds are liquidated, which on average can occur over the span of six to ten years.

Opportunistic Debt: The opportunistic debt portfolio, comprised of 29 funds, provides financing to various companies. While this portfolio has a U.S. bias, some funds invest internationally with exposures in Europe and Asia. These funds are not eligible for redemption. Distributions are received as underlying investments within the funds are liquidated, which on average can occur over the span of three to five years.

Investments Measured at Net Asset Value as of June 30, 2025

Investments at Net Asset Value	Net Asset Value	Unfunded Commitments	Redemption Frequency (If Currently Eligible)	Redemption Notice Period
In-Liquidation	\$ 419,023	\$ —	In liquidation	
Multi-Strategy	270,316,379	—	Monthly	60-90 Days
Opportunistic Debt	44,838,161	—	Annual	90 Days
Private Real Estate Funds	55,841,875	—	Daily	90 Days
Total Investments at Net Asset Value	<u>\$371,415,438</u>	<u>\$ —</u>		

In-Liquidation: MPERS currently has a small investment in two hedge funds that are in liquidation. These funds have closed and MPERS is awaiting the sale of final assets.

Multi-Strategy: Consisting of one pooled investment fund, this group aims to pursue varying strategies in order to diversify risks and reduce volatility. Due to contractual lock-up restrictions, the value of these investments is eligible for redemption in the next six months.

Opportunistic Debt: Consisting of one fund, this group uses public, but illiquid, fixed income structuring to achieve higher returns by separating and securitizing the unique credit risk tranches.

Private Real Estate Funds: MPERS invests in two core private real estate funds that are commingled in nature. One is eligible for redemption on a quarterly basis and one on a daily basis.

Note 3 (g) – Investment Interest Rate Risk

The following table summarizes the maturities of government obligations, corporate bonds, convertible corporate bonds, mortgages, and asset-backed securities which are exposed to interest rate risk.

Summary of Weighted Average Maturities as of June 30, 2025

Investment Type	Fair Value	Investment Maturities (in years)			
		Less than 1	1 – 5	6 – 10	More than 10
Asset-Backed Securities	\$ 343,755,234	\$ 241,164	\$ 41,506,979	\$ 101,269,809	\$ 200,737,282
Commercial Mortgage-Backed Securities	107,983,162	—	—	9,359,114	98,624,048
Corporate Bonds	11,695,149	1,004,827	7,337,579	917,189	2,435,554
Government Agencies	57,004,355	—	1,681,822	7,701,610	47,620,923
Government Bonds	81,092,618	—	913,399	—	80,179,219
Government Mortgage-Backed Securities	721,187,028	2,489	3,677,917	267,759	717,238,863
Government-Issued Commercial Mortgage-Backed Securities	6,606,622	—	—	—	6,606,622
Index Linked Government Bonds	20,460,066	—	9,304,749	—	11,155,317
Municipal/Provincial Bonds	197,318,442	29,963	22,691,231	19,490,197	155,107,051
Non-Government-Backed C.M.O.'s	12,319,036	346,758	—	2,074,038	9,898,240
Total	<u>\$1,559,421,712</u>	<u>\$ 1,625,201</u>	<u>\$ 87,113,676</u>	<u>\$ 141,079,716</u>	<u>\$1,329,603,119</u>

NOTE 3 (h) – Investment Credit Ratings

The table below summarizes the credit ratings of the government obligations, corporate bonds, mortgages, and asset-backed securities.

Summary of Investment Credit Ratings as of June 30, 2025

Investment Type	AAA	AA	A	BBB	BB
Asset-Backed Securities	\$ 76,895,981	\$ 59,354,831	\$ —	\$ —	\$ —
Commercial Mortgage-Backed Securities	934,436	5,832,345	—	4,915,852	—
Corporate Bonds	—	2,435,554	5,332,304	3,424,771	302,582
Government Agencies	—	53,078,144	—	—	—
Government Bonds	—	—	—	—	—
Government Mortgage-Backed Securities	—	—	—	—	—
Government-Issued Commercial Mortgage-Backed Securities	—	—	—	—	—
Index Linked Government Bonds	—	—	—	—	—
Municipal/Provincial Bonds	23,180,788	101,621,516	—	—	—
Non-Government-Backed C.M.O.'s	2,361,571	—	—	69,114	—
Total	\$ 103,372,776	\$ 222,322,390	\$ 5,332,304	\$ 8,409,737	\$ 302,582

Continued on next page.

Summary of Investment Credit Ratings as of June 30, 2025 (continued)

Investment Type	CCC	Not Rated	US Government Guaranteed	Total
Asset-Backed Securities	\$ 410,482	\$ 207,093,940	\$ —	\$ 343,755,234
Commercial Mortgage-Backed Securities	—	96,299,759	770	107,983,162
Corporate Bonds	—	199,938	—	11,695,149
Government Agencies	—	—	3,926,211	57,004,355
Government Bonds	—	4,738,829	76,353,789	81,092,618
Government Mortgage-Backed Securities	—	44,239	721,142,789	721,187,028
Government-Issued Commercial Mortgage-Backed Securities	—	—	6,606,622	6,606,622
Index Linked Government Bonds	—	9,304,749	11,155,317	20,460,066
Municipal/Provincial Bonds	—	72,516,138	—	197,318,442
Non-Government-Backed C.M.O.'s	1,560,402	8,327,949	—	12,319,036
Total	\$ 1,970,884	\$ 398,525,541	\$ 819,185,498	\$1,559,421,712

Note 3 (i) – Investment Foreign Currency Risk

Currency risk is the risk that changes to foreign exchange rates will adversely impact the fair value of non-U.S. Dollar denominated assets. The following table summarizes MPERS' exposure to foreign currencies for all assets that are held in custody at the System's custodial bank. MPERS has exposure to foreign currencies in other areas of the portfolio, such as commingled international funds, hedge funds and private partnerships, which are held in the custody of other banks acting as administrators for the funds.

Exposure to Foreign Currency Risk as of June 30, 2025

Foreign Currency	Equities	Fixed Income	Real Estate / Partnerships	Cash and Cash Equivalents	Total
Australian Dollar	\$ 594,311	\$ —	\$ —	\$ 269	\$ 594,580
British Pound Sterling	470,029	1,471,054	—	117,760	2,058,843
Canadian Dollar	219,785	—	5,552,061	(11,052)	5,760,794
Euro	2,002,952	899,353	39,535,323	801	42,438,429
HK Offshore Chinese Yuan Renminbi	—	—	—	37	37
Hong Kong Dollar	340,542	—	—	—	340,542
Hungarian Forint	—	—	—	1,618	1,618
Japanese Yen	897,666	—	—	288	897,954
Mexican Peso	(12,115)	126,778	—	16,081	130,744
New Zealand Dollar	—	—	—	10,058	10,058
Singapore Dollar	420,433	—	—	4,455	424,888
South African Rand	—	—	—	52	52
Swedish Krona	—	—	—	10,338	10,338
Swiss Franc	—	—	—	142	142
Total Exposure Risk	\$ 4,933,603	\$ 2,497,185	\$45,087,384	\$ 150,847	\$52,669,019

Note 3 (j) – Securities Lending

In accordance with the Board of Trustees' investment policy, MPERS participates in a securities lending program. The Northern Trust Company administers the program. There are no restrictions on the amount of securities that may be lent.

Securities that may be loaned include U.S. government and agency securities, corporate equity, and fixed income securities. Collateral may include cash, U.S. government securities and irrevocable letters of credit. U.S. securities are loaned in exchange for collateral valued at 102% of the fair value of the securities, plus any accrued interest. Non-U.S. securities are loaned in exchange for collateral valued at 105% of the fair value of the securities, plus any accrued interest. On June 30, 2025, MPERS had no credit risk exposure to borrowers since the amount of collateral exceeded the amount of the loans.

Non-cash collateral cannot be pledged or sold unless the borrower defaults. The average term of the System's loans was approximately 96 days as of June 30, 2025. Cash open collateral is invested in a short-term investment pool, which had an interest sensitivity of 15 days as of June 30, 2025. Cash collateral may also be invested separately in "term loans", in which case the investments match the loan term. These loans can be terminated on demand by either lender or borrower. There were no known violations of legal or contractual provisions, or borrower or lending agent default losses. There were no dividends or coupon payments owing on the securities lent. Securities lending earnings are credited on approximately the fifteenth day of the following month.

Indemnification deals with a situation in which a client's securities would not be returned due to the insolvency of a borrower and Northern Trust would fail to live up to its contractual responsibilities relating to the lending of those securities. Northern Trust's responsibilities include performing appropriate borrower and collateral investment credit analyses and demanding adequate types and levels of collateral.

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The following table summarizes the collateral held (including both cash collateral recognized in the Statement of Fiduciary Net Position and non-cash collateral).

<i>Collateral Held as of June 30, 2025</i>		
Investment Type	Carrying Amount of Cash Collateral	Fair Value of Non-Cash Collateral
Equities	\$24,314,290	\$45,540,675
Corporate Fixed	3,288,766	573,995
Government & Government-Sponsored Securities	326,106	51,275,184
Total	<u>\$27,929,162</u>	<u>\$97,389,854</u>

Note 3 (k) – Derivatives

A derivative financial instrument is an investment whose value depends on the values of one or more underlying assets, financial indexes, or commodity prices. These investments include futures contracts, options contracts, and forward foreign currency exchange. Derivative financial instruments involve credit risk and market risk, as described in Note 3(a), in varying levels.

Through MPERS' external managers, MPERS holds investments in futures contracts, swaps contracts, options contracts, and forward foreign currency exchange contracts. MPERS enters into futures and swaps contracts to gain exposure to certain markets and enters into forward foreign exchange contracts primarily to hedge foreign currency exposure.

The notional value related to these derivative instruments is generally not recorded in the financial statements; however, the fair value for the various contracts in MPERS' portfolio as of June 30, 2025, is recorded in investments on the Statement of Fiduciary Net Position. The total changes in fair value for the year are recorded in investment income on the Statement of Changes in Fiduciary Net Position.

<i>Investment Derivatives as of June 30, 2025</i>			
Type	Classification	Notional Value	Unrealized Gain
Futures Contracts	Investments, at fair value	\$ 761,416,915	\$ 103,038,598
Swaps Contracts	Investments, at fair value	528,666,558	69,196,914
Total		<u>\$1,290,083,473</u>	<u>\$ 172,235,512</u>

Through the use of derivatives, MPERS is exposed to risk that the counterparties involved in the contracts are unable to meet the terms of their obligation. MPERS' investment managers seek to control this risk through counterparty credit evaluations and approvals, counterparty credit limits, and exposure monitoring procedures. MPERS anticipates the counterparties will be able to satisfy their obligations under contract.

At June 30, 2025, the counterparties' credit ratings for swaps are subject to credit risk as shown in the table below. Derivative instruments traded on the exchange are not subject to counterparty risk and therefore are not included in the table below.

<i>Counterparty Credit Ratings as of June 30, 2025</i>	
Quality Rating	Swaps
A+	\$ 528,666,558
Total Subject to Credit Risk	<u>\$ 528,666,558</u>

NOTE 4 – RECEIVABLES

<i>Receivables as of June 30, 2025</i>	
Type	Total
Contributions – MoDOT	\$ 6,483,284
Contributions – MSHP Non-Uniformed	1,554,677
Contributions – MSHP Uniformed	2,801,390
Contributions – MPERS	259,534
Investment Interest & Income	10,966,902
Investment Sales	48,925,514
Other	129,935
Total	\$ 71,121,236

NOTE 5 – CONTRIBUTIONS

MoDOT, MSHP, and MPERS make contributions to the System, as do employees covered under the Year 2000 Plan-2011 Tier. MPERS' permanent funding policy provides for actuarially determined employer contributions using the entry-age actuarial cost method. As of June 30, 2025, the funding policy has a 14-year closed amortization period for all unfunded liabilities. Actuarially determined rates, expressed as percentages of annual covered payroll, provide for amounts sufficient to fund those benefits designated by state statute to be funded in advance. Actuarial assumptions used to compute contribution requirements are the same as those used to compute the pension benefit obligation. The employee contribution rate for members of the Year 2000 Plan-2011 Tier is set by statute.

Required employer contributions totaling \$252,427,148 for fiscal year 2025, represent funding of normal costs and amortization of the unfunded accrued liability. Actual contributions made were 100% of required contributions. Contribution rates for the fiscal year ended June 30, 2025, as determined by the actuarial valuation for the year ended June 30, 2023, are shown in the following table.

The Board established actual rates to be the same as the actuarially determined rates.

<i>Contribution Rates</i>		
MoDOT, MPERS & Civilian Patrol	Uniformed Patrol	2011 Tier Employee
52.008%	58.491%	4.000%

In September 2014, the Board adopted a contribution stabilization reserve fund from experience gains in an effort to keep contribution rates relatively level over time. In February 2015, the Board established a maximum of \$250 million in the contribution stabilization reserve fund. In February 2024, the Board established separate maximums of \$250 million and \$75 million for the MoDOT, MPERS & Civilian Patrol(Non-Uniformed) and Uniformed contribution stabilization reserve funds, respectively. The balance of the Non-Uniformed reserve fund was \$250,000,000 and the balance of the Uniformed reserve fund was \$65,219,979 as of June 30, 2025.

NOTE 6 – DEFERRED RETIREMENT OPTION PROGRAM

MPERS currently provides a BackDROP option. This is an election made at the time of actual retirement. In effect, it provides members an option to elect to receive a portion of their benefits as cash. Since the election is not made until the member actually retires, the option is not treated as a DROP provision in accordance with generally accepted accounting principles.

NOTE 7 – NET PENSION LIABILITY OF EMPLOYERS

The components of the net pension liability of the employers as of June 30, 2025, were as follows:

Total pension liability	\$ 5,098,039,114
Plan fiduciary net position	(4,088,465,006)
Employers' net pension liability	<u>\$ 1,009,574,108</u>
Plan fiduciary net position as a percentage of the total pension liability	80.20%
Covered payroll	\$ 471,974,709
Employers' net pension liability as a percentage of covered payroll	213.90%

Actuarial Assumptions

The total pension liability amounts were determined by actuarial valuations as of June 30, 2025, using the following actuarial assumptions, applied to all prior periods included in the measurement:

Inflation (price)	2.25%
Inflation (wage)	3.00%
Salary Increases	3.00% to 10.50%
Investment Rate of Return	6.50%

Post-retirement healthy mortality rates are used to measure the probabilities of members dying after retirement. The rates currently in use are from the Pub-2010 General, Healthy Retiree, Amount-Weighted, Below-Median Income tables for males and females for Non-Uniformed members and Pub-2010 Public Safety Healthy Retiree, Amount-Weighted, tables for males and females for Uniformed members. Rates are decreased by 4% for non-uniform males and increased by 5% for uniform males. The assumed rates are adjusted for mortality improvement back to the observation period base year of 2010 and then projected generationally from 2010 to 2019 using scale MP-2021 and 90% of scale MP-2021 for years following 2019.

Pre-retirement mortality rates currently in use for active lives are the Pub-2010 General, Employee, Amount-Weighted, Below-Median Income tables for males and females for Non-Uniformed members and the Pub-2010 Public Safety Employee, Amount-Weighted, tables for males and females for Uniformed members. The assumed rates are adjusted for mortality improvement back to the observation period base year of 2010 and then projected generationally from 2010 to 2019 using scale MP-2021 and 90% of scale MP-2021 for years following 2019.

Post-Retirement Disabled mortality rates currently in use for disabled lives are the Pub-2010 General Disabled Retiree, Amount-Weighted tables for males and females for Non-Uniformed members and the Pub-2010 Public Safety Disabled Retiree, Amount-Weighted tables for males and females for Uniformed members. The assumed rates are adjusted for mortality improvement back to the observation period base year of 2010 and then projected generationally from 2010 to 2019 using scale MP-2021 and 90% of scale MP-2021 for years following 2019.

The long-term (30 year) expected rate of return on pension plan investments was determined using a building-block method in which best-estimate ranges of expected future real rates of return (expected returns, net of pension plan investment expense and inflation) are developed for each major asset class. These ranges are combined to produce the long-term expected rate of return by weighting the expected future real rates of return by the target asset allocation percentage and by adding expected inflation. Best estimates of arithmetic real rates of return were adopted by the plan’s trustees after considering input from the plan’s investment consultants and actuary. These estimates for each major asset class included in MPERS’ target asset allocation as of June 30, 2025, (see Note 3) are summarized in the following table:

Asset Class	Long-Term Expected Rate of Return
Global Equity	3.1%
Private Equity	6.0%
Fixed Income	2.2%
Opportunistic Debt	5.7%
Real Assets	3.1%
Real Estate	2.8%

Discount Rate

A single discount rate of 6.50% was used to measure the total pension liability. This single discount rate was based on the expected rate of return on pension plan investments of 6.50%. The projection of cash flows used to determine this single discount rate assumed that plan member contributions will be made at the current contribution rate and that employer contributions will be made at rates equal to the difference between actuarially determined contribution rates and the member rate. Based on these assumptions, the pension plan’s fiduciary net position was projected to be available to make all projected future benefit payments of current plan members. Therefore, the long-term expected rate of return on pension plan investments was applied to all periods of projected benefit payments to determine the total pension liability.

Regarding the sensitivity of the net pension liability to changes in the single discount rate, the following presents the plan’s June 30, 2025 net pension liability, calculated using a single discount rate of 6.50%, as well as what the plan’s net pension liability would be if it were calculated using a single discount rate that is 1-percentage-point lower or 1-percentage-point higher:

<i>Current Single Discount</i>			
	1% Decrease 5.50%	Rate Assumption 6.50%	1% Increase 7.50%
Net Pension Liability	\$1,633,086,520	\$1,009,574,108	\$494,195,855

NOTE 8 – EMPLOYER PROPORTIONATE SHARE

MPERS, as the administrative agent for the pension system, is also an employer of the pension system. The administrative expenses of the pension system are included in the deductions to the pension system’s fiduciary net position. While the employer contributions of the other participating employers are funded from outside revenue sources, the employer contributions of MPERS are funded from sources already recognized as revenues, such as earnings on plan investments or contributions paid by the other participating employers. Attempting to allocate a portion of the net pension liability to MPERS as an employer would result in an allocation of the net pension liability to the other participating employers. Accordingly, MPERS excludes its contributions from the employer proportionate share calculation for the reporting of a net pension liability, by assigning itself a proportionate share of 0%. This exclusion, in essence, shifts the portion of the net pension liability that would accrue to MPERS to the other participating employers.

NOTE 9 – PERSONNEL SERVICES AND RETIREMENT PLAN

MPERS employed 22 full-time employees as of June 30, 2025. Twelve former MPERS employees have retired.

Full-time employees are members of the System (see Note 8). For these employees, MPERS accrued 52.008% of payroll during fiscal year 2025, amounting to \$1,686,748. The amounts for fiscal year 2025 and the four preceding years are shown below. These amounts are recorded as both a contribution and administrative expense. Information regarding the retirement plans can be found in Notes 2 and 5.

Year Ended June 30	<i>Net Obligations</i>	
	Annual Contribution	Accrual
	Percent	Dollars
2021	58.000%	\$1,219,468
2022	58.000	1,374,954
2023	58.000	1,506,656
2024	58.000	1,728,032
2025	52.008	1,686,748

NOTE 10 – OTHER POST-EMPLOYMENT BENEFITS (OPEB)

In addition to the retirement benefits described previously, MPERS provides a portion of health care insurance through the MoDOT and MSHP Medical and Life Insurance Plan (Insurance Plan) in accordance with Missouri State statutes. The Insurance Plan is considered an agent multiple employer defined benefit plan and is administered by MoDOT. The Insurance Plan is financed on a pay-as-you-go basis and is an internal service fund of MoDOT. As of June 30, 2025, there were 9 inactive (retired) members and 22 active employees participating in the Insurance Plan.

Medical insurance benefits are established by the Insurance Plan's Board of Trustees and are approved by the Missouri Highways and Transportation Commission. Benefits include general inpatient and outpatient medical services; mental, nervous and substance abuse care; and prescriptions. Eligible members are employees who retired from the System with a minimum of 5 years of service and who participate in the Insurance Plan. MoDOT issues a publicly available financial report that includes financial statements and required supplementary information for the Insurance Plan. Requests for this report should be addressed to MoDOT, Financial Services Division, P.O. Box 270, Jefferson City, MO 65102.

Employer and member contributions are established by the Insurance Plan's Board of Trustees and are approved by the Missouri Highways and Transportation Commission. Premiums vary by coverage categories, which include retirees, certain disabled employees, spouses, certain dependents, and survivors of deceased employees and retirees.

Changes in Total OPEB Liability

MPERS' proportionate share (0.15%) of the Insurance Plan's net OPEB liability is \$843,082 which was measured as of July 1, 2024, and the total OPEB liability used to calculate the net OPEB liability was determined by an actuarial valuation as of that date.

<i>Summary of Changes in Net OPEB Liability for the Year Ended June 30, 2025</i>	
	Total
Beginning Balance	\$ 837,636
Changes for the year:	
Service Cost	21,151
Interest Cost	30,808
Changes of benefit terms	—
Differences between expected and actual experience	13,958
Changes in assumptions	(30,749)
Benefit Payments	(29,722)
Net Changes	5,446
Ending Balance	<u>\$ 843,082</u>

Deferred Outflows and Inflows

For the year ended June 30, 2025, MPERS recognized net OPEB expense of \$151,200. MPERS reported deferred outflows of resources and deferred inflows of resources related to OPEB from the following sources:

<i>Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB</i>		
	Deferred Outflows	Deferred Inflows
Differences between expected and actual experience	\$ 96,360	\$ 29,538
Changes of assumptions or other inputs	71,511	1,044,126
Contributions subsequent to measurement date	22,909	—
Total	\$ 190,780	\$1,073,664

Deferred outflows resulting from contributions subsequent to the measurement date will be recognized as a change to the net pension liability in each subsequent year. Other deferred amounts related to OPEB will be recognized in expenses as follows:

<i>Deferred Outflows of Resources and Deferred Inflows of Resources Related to OPEB</i>	
Fiscal Year	
2026	\$ (190,315)
2027	(249,971)
2028	(285,558)
2029	(179,273)
2030	(676)
	\$ (905,793)

Actuarial Assumptions

The following actuarial assumptions and other inputs, applied to all periods included in the measurement:

Cost method	Entry Age Normal based upon salary
Salary increases	3.00%
Discount rate	3.93%
Investment rate of return	N/A; the plan is unfunded
Health care cost trend rates	7.50% for 2023, decreasing to 4.50% through 2033
Retirees' share of benefit-related costs	43% - 90% of projected health insurance premiums for retirees
Admin Expense Trend Rate	3.00%
Inflation Rate	2.00%

- The salary increases were based on projected salaries, which include COLAs, provided by MoDOT.
- The discount rate was based on Bond Buyer General Obligation 20-Bond Municipal Bond Index.
- Mortality rates were based on Pub-2010 Public Retirement Plans Safety Employees Mortality Table weighted by Headcount projected by MP-2021.
- The actuarial assumptions used in the June 30, 2025 valuation were based on the results of an actuarial experience study for the period July 1, 2023-June 30, 2024.
- It is assumed the current employer and member contributions will continue as approved by the Commission.
- Changes of assumptions and other inputs reflect a change in the discount rate from 3.65% in 2024 to 3.93% in 2025.

Financial Section | Notes to the Financial Statements

The following table illustrates the impact of interest rate sensitivity on the Net OPEB Liability as of June 30, 2025:

<i>Interest Rate Sensitivity</i>			
	1% Decrease	Current Discount Rate	1% Increase
Net OPEB Liability	\$961,371	\$843,082	\$745,970

The following table illustrates the impact of healthcare cost trend sensitivity on the Net OPEB Liability as of June 30, 2025:

<i>Healthcare Cost Trend Sensitivity</i>			
	1% Decrease	Current Discount Rate	1% Increase
Net OPEB Liability	\$725,201	\$843,082	\$989,336

NOTE 11 – CAPITAL ASSETS

Capital Asset Account Balances

	Land	Construction in Progress - Buildings	Building	Furniture and Equipment	Software	Total Capital Assets
Cost						
Balances as of June 30, 2024	\$ 188,319	\$ —	\$ 745,828	\$ 181,576	\$ 3,288,161	\$ 4,403,884
Additions	—	4,467,401	49,950	—	—	4,517,351
Disposals	—	—	—	—	—	—
Balances as of June 30, 2025	188,319	4,467,401	795,778	181,576	3,288,161	8,921,235
Accumulated Depreciation						
Balances as of June 30, 2024	\$ —	\$ —	\$ 438,767	\$ 150,597	\$ 3,288,161	\$ 3,877,525
Additions	—	—	36,106	7,817	—	43,923
Disposals	—	—	—	—	—	—
Balances as of June 30, 2025	—	—	474,873	158,414	3,288,161	3,921,448
Net Capital Assets as of June 30, 2025	\$ 188,319	\$ 4,467,401	\$ 320,905	\$ 23,162	\$ —	\$ 4,999,787

NOTE 12 – LINE OF CREDIT AND LEVERAGE

In December 2022, MPERS entered into a revolving credit agreement with Bank of America, N.A. consisting of a line of credit not to exceed \$200 million. Under the terms of the credit agreement, each revolving loan shall bear interest on the outstanding principal amount thereof at a rate per annum equal to the Base Rate (fluctuating rate of interest per annum equal to the highest of (a) the Federal Funds Rate plus 0.50%, (b) the rate of interest in effect for such day as publicly announced from time to time by Bank of America as its “prime rate,” and (c) the Daily SOFR Rate plus 1.00%) plus the applicable spread (a rate per annum equal to (a) in the case of Base Rate Loans, 0.00% and (b) in the case of Daily SOFR Rate Loans, 1.20%). MPERS leverage ratio at June 30, 2025, was approximately 3.9%. The bank line of credit at June 30, 2025 was zero. The credit agreement contains covenants customary for financings of this type, including, but not limited to, financial covenants, which requires that MPERS Fair Value-Total Fund Investment Assets shall not be less than \$1.5 billion at any time and MPERS Funded Ratio shall not be less than 50% at any time. MPERS was in compliance with these financial covenants at June 30, 2025.

NOTE 13 – COMMITMENTS

MPERS has committed \$2,029,419,610 of which \$1,328,674,872 has been invested, leaving total unfunded commitments to private equity, real estate, real assets, and opportunistic debt of \$700,744,738 as of June 30, 2025. The total unfunded investment commitments are not recorded in the accompanying Statement of Fiduciary Net Position.

NOTE 14 – RISK MANAGEMENT

MPERS is exposed to various risks of loss related to natural disasters, asset theft or damage, errors and omissions, torts, and employee injuries.

MPERS has purchased commercial insurance related to capital asset loss and damage. Ancillary coverage provided through the property policy includes coverage for accounts receivable, loss of money and securities, employee dishonesty, and forgery and alterations. MPERS carries a \$2 million umbrella liability policy. MPERS has coverage through Missouri Highway and Transportation Commission's Self-Insurance Fund related to workers' compensation. MPERS has also purchased a directors and officers liability policy with \$1 million aggregate coverage. This coverage is inclusive of legal defense costs and carries a \$100,000 deductible. The State's Legal Expense Fund covers all state employees and officers, and MPERS has purchased surety bonds for the executive director and staff. Settlements have not exceeded coverages for each of the past three fiscal years.

MPERS has a disaster recovery plan that provides for continued computer operations at a remote location should the retirement office be unavailable for normal computing operations.

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Schedule of Changes in the Employers' Net Pension Liability Year Ended June 30

	2025	2024	2023	2022	2021
Total Pension Liability					
Service Cost ⁽¹⁾	\$ 61,215,725	\$ 57,997,597	\$ 52,759,573	\$ 55,097,433	\$ 43,726,886
Interest on the Total Pension Liability	314,502,206	298,242,729	279,014,877	275,067,181	278,522,994
Benefit Changes	—	—	—	—	—
Difference Between					
Expected and Actual Experience	69,869,402	197,772,783	211,609,428	16,085,222	(26,471,689)
Assumption Change	—	—	44,379,018	—	226,319,675
Benefit Payments ⁽²⁾	(309,748,296)	(299,084,308)	(288,084,295)	(278,612,715)	(266,108,191)
Refunds	(1,123,383)	(996,748)	(972,241)	(1,024,986)	(611,132)
Disability Premiums ⁽²⁾	—	—	—	—	(1,600,628)
Transfers to Other Retirement Systems ⁽²⁾	—	—	—	—	(1,802,900)
Net Change in Total Pension Liability	134,715,654	253,932,053	298,706,360	66,612,135	251,975,015
Total Pension Liability – Beginning	4,963,323,460	4,709,391,407	4,410,685,047	4,344,072,912	4,092,097,897
Total Pension Liability – Ending (a)	\$ 5,098,039,114	\$ 4,963,323,460	\$ 4,709,391,407	\$ 4,410,685,047	\$ 4,344,072,912
Plan Fiduciary Net Position					
Contributions – Employer	\$ 252,427,148	\$ 254,358,101	\$ 232,813,995	\$ 212,711,117	\$ 208,212,848
Contributions – Employee ⁽³⁾	14,766,703	15,882,070	11,448,174	12,655,780	7,095,963
Pension Plan Net Investment Income	460,643,465	432,121,499	264,758,383	122,767,680	699,644,536
Benefit Payments ⁽²⁾	(309,748,296)	(299,084,308)	(288,084,295)	(278,612,715)	(266,108,191)
Refunds	(1,123,383)	(996,748)	(972,241)	(1,024,986)	(611,132)
Disability Premiums ⁽²⁾	—	—	—	—	(1,600,628)
Pension Plan Administrative Expense	(6,158,138)	(6,250,951)	(5,529,258)	(5,229,018)	(4,585,473)
Net Transfers ^{(1) (2)}	—	—	—	—	277,417
Net Change in Plan Fiduciary Net Position	410,807,499	396,029,663	214,434,758	63,267,858	642,325,340
Plan Fiduciary Net Position – Beginning	3,677,657,507	3,281,627,844	3,067,193,086	3,003,925,228	2,361,599,888
Plan Fiduciary Net Position – Ending (b)	\$ 4,088,465,006	\$ 3,677,657,507	\$ 3,281,627,844	\$ 3,067,193,086	\$ 3,003,925,228
Adjustment – GASB 75 Implementation					
Plan Fiduciary Net Position – Ending (as restated)					
Employers' Net Pension Liability (a) – (b)	\$ 1,009,574,108	\$ 1,285,665,953	\$ 1,427,763,563	\$ 1,343,491,961	\$ 1,340,147,684
Plan Fiduciary Net Position as a % of Total Pension Liability	80.20%	74.10%	69.68%	69.54%	69.15%
Covered Payroll	\$ 471,974,709	\$ 438,993,763	\$ 400,799,485	\$ 367,493,332	\$ 359,409,940
Employers' Net Pension Liability as a % of Covered Payroll	213.90%	292.87%	356.23%	365.58%	372.87%

Continued on next page.

(1) Starting fiscal year 2022, Service Cost includes disability expense, service purchases, and transfers from other systems.

(2) Starting fiscal year 2022, Benefit Payments includes disability premiums and transfers to other systems.

(3) Starting fiscal year 2022, Contributions – Employee includes service purchases and transfers from other systems.

Schedule of Changes in the Employers' Net Pension Liability Year Ended June 30 (continued)

	2020	2019	2018	2017	2016
Total Pension Liability					
Service Cost ⁽¹⁾	\$ 44,048,083	\$ 43,971,030	\$ 46,621,377	\$ 45,713,403	\$ 45,441,305
Interest on the Total Pension Liability	274,791,358	271,174,089	286,457,436	283,568,441	280,432,068
Benefit Changes	—	—	(7,684)	—	—
Difference Between					
Expected and Actual Experience	3,494,582	203,459	(37,173,164)	(37,286,966)	(39,810,009)
Assumption Change	—	—	142,556,109	—	—
Benefit Payments ⁽²⁾	(262,710,811)	(255,310,406)	(254,131,209)	(246,617,775)	(236,488,629)
Refunds	(796,107)	(780,538)	(503,007)	(321,328)	(198,106)
Disability Premiums ⁽²⁾	(1,640,971)	(1,615,860)	(1,601,605)	(1,620,418)	(1,567,825)
Transfers to Other Retirement Systems ⁽²⁾	(2,457,945)	(2,111,007)	(2,823,042)	(2,724,631)	(1,921,451)
Net Change in Total Pension Liability	54,728,189	55,530,767	179,395,211	40,710,726	45,887,353
Total Pension Liability – Beginning	4,037,369,708	3,981,838,941	3,802,443,730	3,761,733,004	3,715,845,651
Total Pension Liability – Ending (a)	\$ 4,092,097,897	\$ 4,037,369,708	\$ 3,981,838,941	\$ 3,802,443,730	\$ 3,761,733,004
Plan Fiduciary Net Position					
Contributions – Employer	\$ 210,871,852	\$ 210,166,927	\$ 204,955,180	\$ 206,562,924	\$ 199,609,396
Contributions – Employee ⁽³⁾	6,547,351	5,996,344	5,001,418	4,891,932	3,482,513
Pension Plan Net Investment Income	(10,667,857)	154,326,818	197,619,838	220,301,741	21,432,095
Benefit Payments ⁽²⁾	(262,710,811)	(255,310,406)	(254,131,209)	(246,617,775)	(236,488,629)
Refunds	(796,107)	(780,538)	(503,007)	(321,328)	(198,106)
Disability Premiums ⁽²⁾	(1,640,971)	(1,615,860)	(1,601,605)	(1,620,418)	(1,567,825)
Pension Plan Administrative Expense	(4,291,028)	(4,372,966)	(4,693,492)	(4,515,458)	(4,370,860)
Net Transfers ^{(1) (2)}	1,025,629	321,363	(955,597)	(980,524)	808,228
Net Change in Plan Fiduciary Net Position	(61,661,942)	108,731,682	145,691,526	177,701,094	(17,293,188)
Plan Fiduciary Net Position – Beginning	2,423,261,830	2,314,530,148	2,168,838,622	1,992,073,946	2,009,367,134
Plan Fiduciary Net Position – Ending (b)	\$ 2,361,599,888	\$ 2,423,261,830	\$ 2,314,530,148	\$ 2,169,775,040	\$ 1,992,073,946
Adjustment – GASB 75 Implementation				(936,418)	
Plan Fiduciary Net Position – Ending (as restated)				\$ 2,168,838,622	
Employers' Net Pension Liability (a) – (b)	\$ 1,730,498,009	\$ 1,614,107,878	\$ 1,667,308,793	\$ 1,633,605,108	\$ 1,769,659,058
Plan Fiduciary Net Position as a % of Total Pension Liability	57.71%	60.02%	58.13%	57.06%	52.96%
Covered Payroll	\$ 363,980,262	\$ 362,747,630	\$ 353,751,292	\$ 356,515,416	\$ 344,635,441
Employers' Net Pension Liability as a % of Covered Payroll	475.44%	444.97%	471.32%	457.95%	513.49%

(1) Starting fiscal year 2022, Service Cost includes disability expense, service purchases, and transfers from other systems.

(2) Starting fiscal year 2022, Benefit Payments includes disability premiums and transfers to other systems.

(3) Starting fiscal year 2022, Contributions – Employee includes service purchases and transfers from other systems

**Schedule of Employers' Contributions
Last 10 Fiscal Years**

	Actuarially Determined Contributions	Actual Contributions	Contribution Deficiency (Excess)	Covered Payroll*	Contributions as a Percentage of Covered Payroll
2016	\$199,609,396	\$199,609,396	\$ —	\$344,154,131	58.000%
2017	206,562,924	206,562,924	—	356,142,972	58.000
2018	204,955,180	204,955,180	—	353,371,000	58.000
2019	210,166,927	210,166,927	—	362,356,771	58.000
2020	210,871,852	210,871,852	—	363,572,159	58.000
2021	208,212,848	208,212,848	—	358,987,669	58.000
2022	212,711,117	212,711,117	—	366,743,305	58.000
2023	232,813,995	232,813,995	—	400,285,401	58.162
2024	254,358,101	254,358,101	—	438,548,450	58.000
2025	252,427,148	252,427,148	—	471,394,700	53.549

*Values are estimated from contribution rate and actual contribution amount.

**Schedule of Investment Returns
Last 10 Fiscal Years**

Fiscal Year Ended June 30	Annual Money-Weighted Rate of Return
2016	1.02%
2017	11.22%
2018	9.20%
2019	6.84%
2020	(0.44)%
2021	30.79%
2022	4.00%
2023	8.87%
2024	13.36%
2025	12.71%

Notes to Required Supplementary Information

The information presented in the required supplementary schedules was determined as part of the actuarial valuation at the dates indicated. Additional information as of the latest actuarial valuation follows:

Valuation Date	June 30, 2025
Actuarial Cost Method	Entry Age
Amortized Method	Closed, level percent-of-payroll
Remaining Amortization Period	14 years
Asset Valuation Method	3-Year Smoothed Fair Value; 20% Corridor
Inflation	2.25% (price inflation)
Actuarial Assumptions:	
Investment Rate of Return	6.50%
Projected Salary Increase	3.00% to 10.50% (includes 3.00% wage inflation)
Cost-of-Living Adjustments	1.80% Compound

Other Post-Employment Benefits (OPEB) Plan
Schedule of Changes in Net OPEB Liability and Related Ratios for
MoDOT and MSHP Medical and Life Insurance Plan

	2025	2024	2023	2022	2021
Total OPEB Liability					
Service Cost	\$ 21,151	\$ 53,828	\$ 81,825	\$ 74,581	\$ 51,302
Interest Cost	30,808	69,719	52,551	45,896	55,700
Changes of Benefit Terms	—	—	—	—	—
Differences Between Expected and Actual Experience	13,958	(37,641)	(8,837)	263,007	452
Changes in Assumptions	(30,749)	(1,150,169)	(530,806)	(368)	393,621
Benefit Payments	(29,722)	(27,227)	(33,227)	(35,099)	(33,865)
Net Change in Total OPEB Liability	5,446	(1,091,490)	(438,494)	348,017	467,210
Total OPEB Liability (Beginning)	837,636	1,929,126	2,367,620	2,019,603	1,552,393
Total OPEB Liability (Ending)	\$ 843,082	\$ 837,636	\$ 1,929,126	\$ 2,367,620	\$ 2,019,603
Plan Fiduciary Net Position					
Contributions	\$ 29,722	\$ 27,227	\$ 33,227	\$ 35,099	\$ 33,865
Benefit Payments	(29,722)	(27,227)	(33,227)	(35,099)	(33,865)
Net Change in Plan Fiduciary Net Position	—	—	—	—	—
Plan Fiduciary Net Position (Beginning)	—	—	—	—	—
Plan Fiduciary Net Position (Ending)	\$ —	\$ —	\$ —	\$ —	\$ —
Net OPEB Liability (Ending)	\$ 843,082	\$ 837,636	\$ 1,929,126	\$ 2,367,620	\$ 2,019,603
Net Position as a Percentage of OPEB Liability	N/A	N/A	N/A	N/A	N/A
Covered-Employee Payroll	\$ 2,654,939	\$ 2,236,049	\$ 2,016,099	\$ 1,889,323	\$ 1,791,020
Net OPEB Liability as a Percentage of Payroll	31.76%	37.46%	95.69%	125.32%	112.76%

Continued on next page.

Notes:

The Insurance Plan is an internal service fund of MoDOT and is funded on a pay-as-you-go basis. The Plan is not a trust and does not have a fiduciary net position.

These schedules are intended to present information for 10 years but may be built prospectively. Additional years will be displayed as they become available.

Other Post-Employment Benefits (OPEB) Plan
Schedule of Changes in Net OPEB Liability and Related Ratios for
MoDOT and MSHP Medical and Life Insurance Plan (Continued)

	2020	2019	2018
Total OPEB Liability			
Service Cost	\$ 64,136	\$ 66,676	\$ 81,000
Interest Cost	61,346	54,714	49,929
Changes of Benefit Terms	—	—	—
Differences Between Expected and Actual Experience	(17,475)	(12,565)	—
Changes in Assumptions	(58,897)	(81,559)	(238,129)
Benefit Payments	(35,159)	(34,004)	(37,055)
Net Change in Total OPEB Liability	13,951	(6,738)	(144,255)
Total OPEB Liability (Beginning)	1,538,442	1,545,180	1,689,435
Total OPEB Liability (Ending)	\$ 1,552,393	\$ 1,538,442	\$ 1,545,180
Plan Fiduciary Net Position			
Contributions	\$ 35,159	\$ 34,004	\$ 37,055
Benefit Payments	(35,159)	(34,004)	(37,055)
Net Change in Plan Fiduciary Net Position	—	—	—
Plan Fiduciary Net Position (Beginning)	—	—	—
Plan Fiduciary Net Position (Ending)	\$ —	\$ —	\$ —
Net OPEB Liability (Ending)	\$ 1,552,393	\$ 1,538,442	\$ 1,545,180
Net Position as a Percentage of OPEB Liability	N/A	N/A	N/A
Covered-Employee Payroll	\$ 1,760,722	\$ 1,639,523	\$ 790,000
Net OPEB Liability as a Percentage of Payroll	88.17%	93.83%	195.59%

Notes:

The Insurance Plan is an internal service fund of MoDOT and is funded on a pay-as-you-go basis. The Plan is not a trust and does not have a fiduciary net position.

These schedules are intended to present information for 10 years but may be built prospectively. Additional years will be displayed as they become available

Other Post-Employment Benefits (OPEB) Plan
Schedule of MPERS' Proportionate Share of Net OPEB Liability
for MoDOT and MSHP Medical and Life Insurance Plan

Year Ended June 30	Proportion of Net OPEB Liability	Proportionate Share of Net OPEB Liability	Covered Employee Payroll	Net OPEB Liability as % of Covered Employee Payroll	Net Position as % of Total OPEB Liability
2018	0.14%	\$1,545,180	\$ 790,000	195.59%	N/A
2019	0.14%	1,538,442	1,639,523	93.83%	N/A
2020	0.15%	1,552,393	1,760,722	88.17%	N/A
2021	0.15%	2,019,603	1,791,020	112.76%	N/A
2022	0.17%	2,367,620	1,889,323	125.32%	N/A
2023	0.17%	1,929,126	2,016,099	95.69%	N/A
2024	0.15%	837,636	2,236,049	37.46%	N/A
2025	0.15%	843,082	2,654,939	31.76%	N/A

Notes:

The Insurance Plan is financed on a pay-as-you-go basis and is an internal service fund of MoDOT.

These schedules are intended to present information for 10 years but may be built prospectively. Additional years will be displayed as they become available.

Schedule of Administrative Expenses For the Year Ended June 30, 2025

Personnel Services

Salary Expense	\$3,055,660
Employee Benefit Expense	2,045,079
Total Personnel Services	5,100,739

Professional Services

Actuarial Services	79,086
Audit Services	65,600
Legislative Consultant	31,200
Investment Special Consulting	30,500
Insurance Consultant	7,370
Other Consultant Fees	6,107
Fiduciary Insurance	25,233
IT Hosting and Support	341,017
Other	14,484
Total Professional Services	600,597

Miscellaneous

Depreciation	43,923
Meetings / Travel / Education	86,618
Equipment / Supplies	105,020
Printing / Postage	32,451
Bank Service Charge	9,478
Building Expenses	56,732
Other	122,580
Total Miscellaneous	456,802

Total Administrative Expenses	<u><u>\$6,158,138</u></u>
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Schedule of Investment Expenses For the Year Ended June 30, 2025

Investment Income Expenses

Management and Performance Fees by Asset Class	
Equities	\$ 2,306,808
Fixed Income Core	20,646
Opportunistic Debt	12,720,334
Real Estate	3,263,928
Private Equity	12,750,296
Real Assets	1,279,543
Hedge Funds	2,070,869
Total Management and Performance Fees	<u>\$34,412,424</u>

Investment Custodial Fees	\$ 101,015
Performance Management	212,833
General Consultant (Monitoring) Fee	360,147
Professional Fees	361,724
Investment Interest Expense	1,866,692
Other Fees / Expenses (Refunds)	(143,313)
Total Investment Income Expenses	<u>\$37,171,522</u>

Securities Lending Expenses

Borrower Rebates (Refunds)	\$ 1,260,259
Bank Fees	57,275
Total Securities Lending Expenses	<u>\$ 1,317,534</u>

Schedule of Consultant and Professional Expenses For the Year Ended June 30, 2025

<u>Professional / Consultant</u>	<u>Nature of Service</u>	
Gabriel, Roeder, Smith & Co.	Actuarial	\$ 79,086
LexisNexis Risk Data Management	Death Audit Services	1,800
MO Dept. of Health & Senior Services	Death Audit Services	603
Pension Benefit Information	Death Audit Services	10,871
Cobalt Community Research	Customer service and benefit delivery	1,210
Assured Partners	Director's & Officer's Insurance	25,233
Williams-Keepers, LLC	Financial Audit Services	65,600
Heartland Business Systems	Information Technology	51,387
Huber & Associates	Information Technology	3,300
Levi, Ray & Shoup, Inc.	Information Technology	259,091
Sikich, LLP	Information Technology	27,239
Thompson Coburn, LLP	Legal Consulting	6,107
Michael G. Winter Consultants, LLC	Legislative Consulting	31,200
Evercore Group LLC	Market Research	30,500
Charlesworth Benefits	Risk Management Consulting	7,370
Total Consultant and Professional Expenses		<u>\$ 600,597</u>

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INVESTMENT SECTION

Investing in People, Purpose, and Progress

Sharpening Skills, Strengthening Futures

In 1955, the Missouri State Highway Patrol's shooting team stood as a symbol of discipline, training, and preparedness. Their focus and precision reflected the values defined by public service, the kind of long-term investment that builds strong institutions.

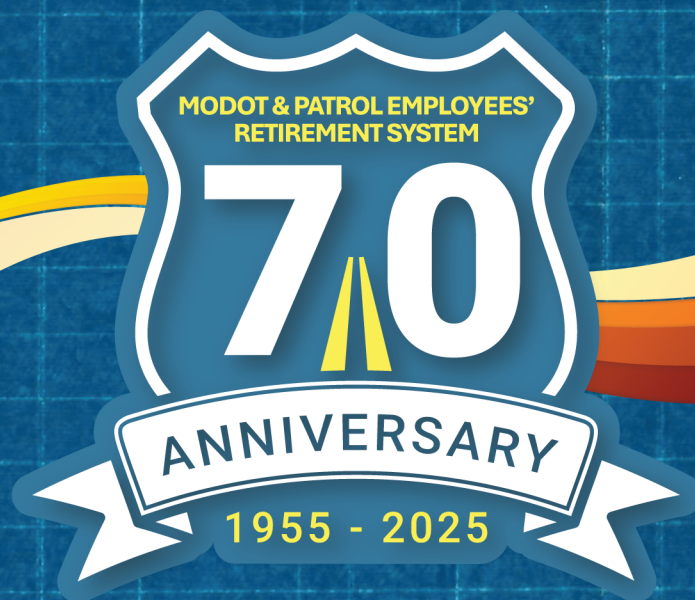
That same year, Missouri made a parallel investment: the creation of a retirement system for employees of the Highway Patrol and the Highway Department. This decision was forward-looking, grounded in the belief that those who serve the public deserve a secure future.

The retirement plan was not just a benefit, it was a strategy. It enabled workforce renewal, improved retention, and fostered a more sustainable future. Like training a team for excellence, it required foresight, commitment, and a belief in long-term returns.

Today, the System continues to invest in the future through diversified portfolios, responsible stewardship, and a focus on delivering value to members and the state. But it all began with a simple idea: that investing in people is the most powerful investment of all.

Image:

MSHP shooting team, 1955



September 30, 2025

To the Board of Trustees and System Members:

It is my pleasure to present the Investment Section of the Annual Comprehensive Financial Report for Fiscal Year 2025. This year's theme, Honoring Our Past, Building Our Future, perfectly captures the spirit of MPERS' investment journey. We have come a long way, and this year's results affirm the strength of our strategy and the vision of our Board.

When I joined MPERS in 2003, our investment portfolio was among the lowest performing public funds in the country. Thanks to the Board's commitment to building a strong investment team and governance structure, we have transformed that legacy into one of excellence. Today, MPERS is not just competitive, we are winning.

In Fiscal Year 2025, the investment portfolio delivered a 12.71% return, outperforming the policy benchmark of 10.74%, the median public fund return of 11.1%, and the actuarial assumption hurdle of 6.5%. Staff's disciplined implementation and active management were pivotal. Tactical decisions, including the strategic use of leverage, contributed approximately two percentage points of additional return.

Over longer horizons, results remain strong. MPERS' 20-year annualized return now stands at 8.32%, comfortably exceeding the actuarial assumed rate. That performance places MPERS in the 1st percentile among public fund peers, while the passive 20-year policy benchmark also ranks in the 15th percentile. Such sustained outperformance is rare and underscores the bold vision and high expectations the Board has set, expectations we continue to meet and exceed.

Viewed in total, Fiscal Year 2025 will be seen as a landmark year for MPERS. Our funded ratio increased to 75.7%, the highest in the System's history (rising from 70.6% in the prior year). This milestone reflects the power of a disciplined investment strategy aligned with aggressive funding policies. It is more than a number, it is a sign of long-term sustainability and a promise kept to our members.

It is an honor to serve as your Chief Investment Officer. I trust you will find this year's report both informative and inspiring.

Sincerely,



Larry Krummen, CFA
Chief Investment Officer



Kevin M. Leonard

Partner

NEPC LLC

255 State Street
Boston, MA 02109

October 16, 2025

The Board of Trustees

MoDOT & Patrol Employees' Retirement System
913 W Stadium Blvd
Jefferson City, MO 65109

RE: 2025 Annual ACFR Letter

Dear Board Members:

In our role as the general investment consultant, we assist the Board in several manners: determining and executing the overall asset allocation strategy of the Plan; advising on the investment policy of the Plan; facilitating investment manager searches (both traditional and alternative asset classes); conducting custodial service searches; providing ongoing performance evaluation for each individual investment manager and the overall investment portfolio; as well as providing pertinent education to the Board.

MPERS' objective is to provide service, disability, death and vested retirement benefits to members and their beneficiaries. To ensure a solid foundation for the future of the System, MPERS has developed an investment program designed to achieve the actuarially assumed rate of return over the long term, while prudently managing the risk of the portfolio. The pension plan is required to satisfy the need to pay accumulated/earned retirement benefits today, while at the same time be prepared for "uncertain" future benefits. This balancing of short-term versus long-term needs is a key tenant in the overall construction of the portfolio. To facilitate this balance, the Board has adopted a diversified asset allocation structure. Our goal is to diversify the System's assets within the traditional and non-traditional asset classes to reduce volatility, achieve above market returns, and to better protect the portfolio against difficult market conditions.

MPERS Fiscal Year 2025 Performance and Key Initiatives

For the fiscal-year-ending June 30, 2025, the MPERS Total Plan returned +12.7% on a net-of-fees basis and a time-weighted rate of return, outperforming the policy index return of 10.74%. For the fiscal-year-ending June 30, 2025, relative to the peer group comparison (InvMetrics Public DB Net Universe), MPERS ranked in the 8th percentile (1st percentile being the highest, 100th percentile being the lowest). For the fiscal year, total Plan outperformance (relative to policy index) was driven by relative outperformance in the public equities, traditional fixed income, opportunistic debt, and the real estate portfolios.

Investment Section | Investment Consultant Report

During Fiscal Year 2025, key initiatives accomplished included:

- Conducted a comprehensive/formal review of the Plan's asset allocation in concert with NEPC's 2025 Client Actions and Asset Class Assumptions.
 - As part of the review, NEPC and Staff evaluated the Plan's existing asset allocation and discussed any potential changes to its current structure.
 - Based on the review and discussions, no changes were recommended.
- A liquidity study was conducted as part of the asset allocation review.
 - The results of the liquidity study reaffirmed that the Plan's liquidity remains healthy enough to support the current allocation to alternative investments, but certain economic environments and developing trends may change the liquidity profile of the Plan.
- Continued to develop the alternative investment portfolio.
 - A private market pacing plan was conducted for the opportunistic debt, private equity, real assets, and real estate portfolios. Each pacing plan provided a recommended commitment amount for upcoming vintage years.
 - New commitments were made to the private equity and opportunistic debt portfolios.

As the asset allocation strategy evolves year-after-year, diversification and risk mitigation will continue to be the pillars of MPERS' asset allocation structure.

NEPC, LLC appreciates the opportunity to serve as your consultant. It is a pleasure to work with MPERS and we look forward to continuing our relationship for the benefit of the Board, Staff, and most importantly, the members of the System.

Best Regards,

A handwritten signature in dark ink, appearing to read 'K. M. Leonard', with a stylized, flowing script.

Kevin M. Leonard, Partner

Summary of Investment Policy

The primary objective of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS, Plan, or System) is to deliver retirement benefits to active and retired employees in accordance with Missouri law. The investment portfolio is constructed to generate a total return sufficient, together with employer contributions, to meet the Plan's benefit obligations. In pursuing this objective, the Board of Trustees (Board), acting in its fiduciary capacity, seeks to achieve the highest possible rate of return within the Plan's established risk tolerance, while adhering to prudent standards for capital preservation.

To guide its investment decisions and fulfill its fiduciary duty, the Board has adopted the following principles:

1. Preserve the long-term corpus of the fund.
2. Maximize total return within prudent risk parameters.
3. Act in the exclusive interest of the members of the System.

Risk awareness and risk management are essential to any organization. MPERS' *Investment Policy* is the starting point for our investment risk management process. Through the *Investment Policy*, the Board has defined the desired goals and outcomes of the investment program, including provisions that:

- define the assumed rate of return for the portfolio (currently 6.5%);
- establish an asset allocation expected to meet the assumed rate of return while minimizing the volatility of the fund's contribution rates;
- define the approved asset classes and investment strategies;
- delegate the day-to-day management of the investment portfolio to MPERS' staff, consultants, and external asset managers;
- establish a range of asset class allocations from which the CIO can operate;
- establish procedures for hiring and terminating investment managers; and
- establish ongoing due diligence requirements for existing managers.

Throughout the *Investment Policy*, two key investment beliefs dominate the daily management of the investment portfolio.

1. Diversification is critical because the future is unknown.
2. Flexibility in investment policy implementation is critical because particular asset classes will be in or out of favor at various points in the economic cycle.

To ensure the fund is operating within the risk parameters established in the *Investment Policy*, staff monitor the fund's performance relative to MPERS' policy index. The policy index is the return that would be generated if MPERS' portfolio were invested passively across the targeted asset allocation. MPERS' investment staff strives to achieve returns that are equal to or greater than the policy index while taking on risk that is equal to or less than the policy index (with risk defined by standard deviation of returns). The following table shows how MPERS' portfolio compares to the policy index and the median fund in MPERS' public fund peer universe, and commonly used risk measures.

Total Portfolio – Statistical Performance					
Portfolio Characteristic	1-Year	3-Year	5-Year	10-Year	20-Year
Annualized Total Plan Return (net of all fees and expenses)	12.71%	11.61%	13.58%	9.47%	8.33%
Annualized Policy Benchmark Return	10.74%	9.79%	9.35%	7.97%	7.43%
Annualized Peer Median Return	11.09%	10.49%	8.87%	7.39%	7.09%
Total Plan Standard Deviation ⁽¹⁾	4.71	6.71	6.61	6.02	7.17
Policy Benchmark Standard Deviation	4.88	7.95	7.92	6.92	7.19
Peer Median Standard Deviation	7.89	10.89	10.79	10.19	9.49
Total Plan Sharpe Ratio ⁽²⁾	1.61	1.02	1.51	1.21	0.97
Policy Benchmark Sharpe Ratio	1.19	0.66	0.82	0.86	0.86
Peer Median Sharpe Ratio	0.81	0.57	0.59	0.57	0.60
Correlation to Policy Benchmark ⁽³⁾	0.79	0.91	0.88	0.85	0.87

(1) *Standard Deviation* measures historical volatility and specifically measures the dispersion of a set of data points (i.e., monthly returns from the mean). The farther the data points are from the mean, the higher the standard deviation.

(2) *Sharpe Ratio* measures historical volatility and specifically measures the dispersion of a set of data points (i.e., monthly returns from the mean). The farther the data points are from the mean, the higher the standard deviation.

(3) *Correlation* measures how the System's portfolio and the policy benchmark returns are related and if both have reacted to market forces in the same manner. The System's portfolio has a correlation of less than one, indicating that while it typically moves in the same direction as the policy benchmark, it will not move in lockstep with it.

Investment Section | Investment Activity Overview

When evaluating these results, it is important to note that MPERS' policy index is comprised of a mix of asset classes, including several alternative asset classes, with benchmarks that are not investable (private equity with its S&P 500 + 3% illiquidity benchmark, real assets with its CPI + 4% real return benchmark, and the real estate benchmark). Notably, MPERS' targeted asset allocation has generated a 20-year policy benchmark return that ranks in the top 1% of the peer universe. It is also important to note that MPERS calculates actual performance on a net-of-fees basis, while acknowledging that most asset class benchmarks report performance on a gross-of-fees basis. These investment management fees alone are a significant hurdle for staff to overcome. Couple these fees with a policy index that rates favorably with the broader public fund peer universe and one can see how well MPERS investment policy has served stakeholders of the System. Furthermore, MPERS' strong risk-adjusted performance demonstrates that the Board is fulfilling its fiduciary duty by adopting a prudent investment strategy, and MPERS' staff has done an excellent job of adding value over a very challenging policy benchmark.

Fair Value of Investments

As of June 30, 2025, MPERS' investment portfolio had a total fair value of \$4.076 billion, representing a net increase of \$408 million from Fiscal Year 2024. Over the course of the year, \$55 million was transferred out of the fund to pay benefit payments and meet other obligations. When viewed together, the net increase to the portfolio from investment activity equaled \$463 million.

Investment Performance

MPERS' investment portfolio generated an 12.71% return for Fiscal Year 2025, net of all investment fees and based on time-weighted rates of return and market valuations. The performance across the major asset classes (and respective benchmarks) is listed below.

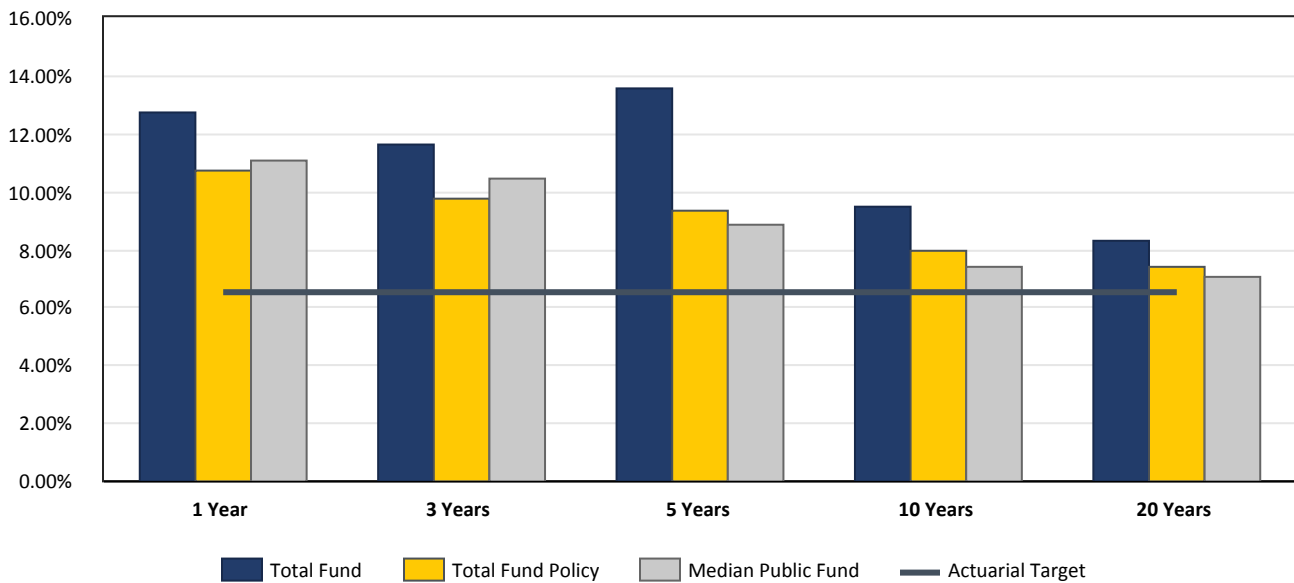
Investment Performance (Including Benchmarks)	1-Year	3-Year	5-Year	10-Year	20-Year
Total Fund	12.71%	11.61%	13.58%	9.47%	8.33%
<i>Policy Benchmark</i>	10.74	9.79	9.35	7.97	7.43
<i>Peer Universe Ranking %</i>	8.00	21.00	1.00	2.00	1.00
Equity Beta	18.22	16.39	18.02	N/A	N/A
<i>Equity Beta Benchmark*</i>	15.23	16.34	15.34	N/A	N/A
Public Equity	20.59	20.26	17.89	N/A	N/A
MSCI ACWI	16.17	17.35	13.65	N/A	N/A
Private Equity	11.03	6.74	17.36	13.70	N/A
S&P 500 + 3%	11.48	12.32	22.10	15.85	N/A
Rates and Credit Beta	9.57	7.21	6.74	N/A	N/A
<i>Rates and Credit Beta Benchmark*</i>	6.99	4.44	0.87	N/A	N/A
Traditional Fixed Income	8.61	6.00	2.30	4.38	5.22
Barclays US AGG Gov/Credit	5.89	2.61	(0.83)	1.92	3.14
Opportunistic Debt	12.13	9.72	13.92	N/A	N/A
Barclays US Corp HY	10.29	9.93	5.97	N/A	N/A
Real Asset Beta	6.05	7.42	12.44	N/A	N/A
<i>Real Asset Beta Benchmark*</i>	3.78	0.87	5.51	6.09	N/A
Real Estate	5.98	3.79	9.27	8.84	7.58
NFI-ODCE	2.47	(5.24)	2.26	5.01	5.36
Real Assets	6.13	10.04	14.67	7.50	N/A
CPI + 4%	6.77	6.97	8.75	7.17	N/A

*Calculated based on the policy weights for each beta group and its benchmark return.

All of MPERS' investment returns are reported net of all investment fees.

When evaluating performance, the Board of Trustees considers three primary performance objectives: 1) meet or exceed the actuarial assumed rate of return of 6.5% over long periods of time, 2) outperform a policy benchmark that represents the return that could be achieved by investing passively in the broad markets in the same percentages to MPERS' target asset allocation, and 3) rank at or above the public fund peer group's median investment return.

Historical returns compared to the three primary performance goals are listed graphically below:



Investment results for Fiscal Year 2025 were successful across all three performance goals: the fund exceeded the actuarial assumed rate of return, it outperformed the policy benchmark return, and it ranked in line with the one-year peer group return and at the top of its peer group on a long-term basis. While a review of annual returns is an important exercise, MPERS' assets and liabilities are long-term in nature, so reviewing performance over more extended periods is more critical and informative. With that in mind, MPERS' long-term investment results are extremely strong relative to the System's performance goals. The 20-year return of 8.33% exceeds the actuarial assumed rate of return over that period, ranks in the top 1% of the peer group, and exceeds the policy benchmark return by 0.90% on an annualized basis. More subtly, but still important, the 20-year return for MPERS' policy benchmark ranks in the top 11% of the peer group, which suggests that MPERS' Board established high expectations for investment results and MPERS' staff has exceeded those expectations. Collectively, the 3-, 5-, 10-, and 20-year performance results all lead to the same conclusion: MPERS' returns exceed the actuarial assumed rate, a very difficult policy benchmark, and rank among the top of MPERS' public fund peer group. These results suggest the investment process (including both oversight and implementation) is working to the benefit of the System's members and sponsors.

Reviewing Fiscal Year 2025 in more detail shows that diversification and implementation flexibility remain key to MPERS' successful investment efforts. The overall fund return of 12.71% exceeded the policy return of 10.74%, with the difference of 1.97% coming from staff's active management decisions, which are authorized under the System's Investment Policy. The Investment Policy allows for staff's tactical use of leverage, which was first used in Fiscal Year 2023. The use of leverage averaged 5.4% over the fiscal year and added an extra 0.70% to the portfolio's return. Staff's choice of managers and tactical asset allocation positioning provided an additional 1.27% to the return in Fiscal Year 2025.

Asset Allocation Overview

The Board of Trustees reviews MPERS' asset allocation annually, with a more formal asset/liability study completed at least every five years (an updated study is scheduled for Fiscal Year 2026). The asset allocation in place today is the culmination of over 20 years of restructuring the portfolio with the goal of strong performance across various market environments, not just when the stock market is strong or on the rise. Those efforts have served the System well, generating consistent performance results with a lower risk profile (as measured by standard deviation of returns). MPERS' 5-, 10-, and 20-year returns have a Sharpe ratio that ranks in the top 1% of the public fund peer universe (a Sharpe ratio measures a system's risk-adjusted returns or the amount earned for a given level of risk). The reduced portfolio volatility has also lowered the volatility of employers' contribution rates, which have now remained stable for over 10 years after climbing considerably following the financial crisis.

Investment Section | Investment Activity Overview

MPERS breaks down all investment strategies into three broad beta groups (equities, interest rates and credit, and real assets). As of June 30, 2025, all the sub-asset class allocations were within the acceptable ranges established by MPERS' *Investment Policy*. The following table shows the ending allocations as of June 30, 2024, along with the target and actual asset allocation as of June 30, 2025. Descriptions of each beta group and its underlying assets are included in subsequent paragraphs.

Beta Group Sub-Asset Allocation	June 30, 2024 Ending Allocation	June 30, 2025 Target Allocation	June 30, 2025 Ending Notional Value Allocation	June 30, 2025 Ending Fair Value Allocation
Equity Beta	49.03%	50.00%	46.75%	44.66%
<i>Public Equity</i>	37.45%	40.00%	36.77%	34.28%
<i>Private Equity</i>	11.58%	10.00%	9.98%	10.38%
Rates and Credit	29.65%	30.00%	33.56%	34.88%
<i>Income</i>	20.33%	22.50%	24.94%	25.92%
<i>Opportunistic Debt</i>	9.32%	7.50%	8.62%	8.96%
Real Assets	21.11%	20.00%	19.55%	20.32%
<i>Real Assets</i>	11.52%	10.00%	10.53%	10.95%
<i>Real Estate</i>	9.59%	10.00%	9.02%	9.37%
Cash	0.21%	—%	0.14%	0.14%

Equity Beta

The equity beta group comprises two asset types: public equity and private equity. The equity beta group currently represents 46.75% of the overall portfolio, a 3.25% underweight to the equity beta group target allocation. Within that overall equity allocation, the fund is in line with the target allocation for private equity structures (9.98% versus the target of 10%) and underweight public equity (36.77% versus the target of 40%). The equity beta group returned 18.22% for Fiscal Year 2025.

Public Equity

MPERS' public equity portfolio ended Fiscal Year 2025 with a 20.59% return, outperforming the global equity policy benchmark, which rose in value by 16.17%. Public equity portfolio performance is divided into two sub-components: diversified beta and active managers. For Fiscal Year 2025, the diversified beta component (which is about 90% of the assets invested) returned 20.80% relative to the benchmark return of 16.17% (MSCI ACWI). The active manager component outperformed the benchmark with a 21.63% return, due to an active strategy focusing on small-cap regional banks. This active regional banking strategy enjoyed a strong 34.04% return for the year. Relative to their large-cap counterparts, smaller US companies rebounded nicely from their weaker performance in Fiscal Year 2024. MPERS' US micro-cap strategy returned 18.67% while the global benchmark (MSCI ACWI) returned 16.17% and the US-centered S&P 500 returned 15.16%.

Private Equity

Private equity returned 11.03% for Fiscal Year 2025, just shy of the benchmark return (S&P 500 + 3%) of 11.48%. Private equity continues to be one of the best-performing asset classes over more extended time periods. Over 10 years, private equity has outperformed traditional public equity by 3.13%, significantly benefiting the overall return of the plan.

Private equity continues to face a challenging market. For a long time, private equity flourished due to low interest rates, which made borrowing cheap and fueled rapid growth. Now, with higher interest costs and tariffs, both of which have pressured margins, companies have less cash on hand and find it harder to grow both organically and through acquisitions. In addition, there is a significant "valuation gap," in which sellers believe their companies are worth more than buyers are willing to pay. This difference of opinion has slowed company sales, leading to fewer distributions to limited partners and muted returns.

Despite this overall trend, MPERS' private equity portfolio has performed well. While the number of exits has slowed, MPERS' managers have been able to sell several companies for very high prices. This has resulted in the fund receiving the second-highest amount of cash distributions since its first private equity commitment in 2005. This success can be attributed to MPERS' focus on managers who build and grow companies from within, rather than relying heavily on borrowed capital. Even in this challenging climate, the private equity portfolio remains cash-flow positive and continues to add value and diversification to the fund over the long term.

Rates and Credit Beta

The rates and credit beta group consists of the traditional fixed income portfolio and the opportunistic debt portfolio. The overall allocation stands at 33.56% versus the target of 30%. During Fiscal Year 2025, this beta group returned 9.57% compared to the benchmark's 6.99%. On a more granular level, the traditional fixed income subcomponent delivered an 8.61% return (versus the benchmark of 5.89%), while the opportunistic debt subcomponent gained 12.13% (versus the benchmark of 10.29%).

Traditional Fixed Income

Staff have viewed traditional fixed income as increasingly attractive over the past couple of years, driven by elevated interest rates. Over the course of the fiscal year, the yield on the 10-year U.S. Treasury declined modestly from 4.36% to 4.24%, while the yield on the 30-year Treasury increased from 4.51% to 4.78%. During Fiscal Year 2025, MPERS substantially increased its allocation to traditional fixed income, shifting from an underweight position of 20.33% to an overweight position of 24.94% (relative to the target allocation of 22.5%). This is MPERS' first overweight to traditional fixed income in 15 years. A significant portion of this overweight was due to strategic purchases of longer-dated U.S. Treasuries, particularly in April and May of 2025, when the yield on the 30-year Treasury hovered around 5%. Staff have also focused on government-guaranteed mortgage pools, investing in the last cash flow tranches with yields exceeding 6%.

MPERS' traditional fixed income portfolio delivered a return of 8.61% in Fiscal Year 2025, outperforming the policy benchmark return of 5.89%. The tactical flexibility granted to staff in managing both the allocation and security selection within the fixed income portfolio was a critical factor in outperforming the benchmark. This performance highlights the value of strategic flexibility in portfolio management. Just as this latitude allowed staff to capitalize on favorable yield conditions over the last two years, it will be equally important in executing a reallocation away from traditional fixed income should yields decline.

Opportunistic Debt

In addition to MPERS' overweight position to traditional fixed income, the System is modestly overweight to opportunistic debt strategies. The year began with a 9.32% allocation relative to a 7.5% policy target and ended at 8.62%. The asset class generated a 12.13% return, which outperformed the publicly traded high-yield benchmark return of 10.29%.

The opportunistic debt portfolio is diversified across several different investment strategies, including opportunistic credit, distressed debt, direct lending, special situations, and public market investments. MPERS has utilized these strategies to varying degrees over the last 15+ years, and as such, the portfolio is well-established. In recent years, the investment focus has shifted toward greater exposure to opportunistic credit amid heightened market volatility. Many of these investments continue to have "dry powder" (the ability to deploy capital), which can be invested as attractive opportunities arise. Going forward, the pace of new commitments is expected to be in line with past years and can be partially funded by rotating exposure from maturing legacy investments into strategies expected to benefit from continued global economic uncertainty.

Real Assets Beta

The broad real assets beta group includes MPERS' real estate holdings along with other real asset-backed strategies, including energy, infrastructure, timber, and mining. The overall allocation to the real assets beta group stands at 19.55% (relative to the target allocation of 20%) and generated a 6.05% return (versus a benchmark of 3.78%) in Fiscal Year 2025. The real asset strategies returned 6.13% for the year (versus the benchmark of 6.77%), with the various real estate strategies producing a 5.98% return (versus the benchmark of 2.47%).

Real Estate

The underlying real estate allocation targets 10% of assets and includes a mix of public and private equity strategies, as well as tactical exposures to public and private debt. MPERS started the year with a 9.59% allocation and ended with a 9.02% allocation. The portfolio generated a 5.98% return for the year, outperforming the policy benchmark's 2.47% return. The core real estate portfolio (primarily stabilized, fully leased properties) generated a 4.14% return, while the non-core portfolio (value-add or opportunistic real estate strategies) returned 6.17%.

While office vacancy rates improved this year, they remain higher than average in most major U.S. cities. Higher interest rates have proven to be a meaningful headwind for real estate. Debt financing is typically a key dynamic in the real estate market, and with debt now more expensive to carry, many properties are “underwater,” i.e., the interest expense exceeds the rental income received. Staff recognized this risk shortly after the onset of COVID and did two things. The first action was to reduce focus on core real estate investments and the underlying exposure to office buildings. The second action was to steer real estate investment toward resurgent retail shopping center markets that serve local communities. These actions continue to serve the System well in the current market environment and contributed to the outperformance within the real estate sector for Fiscal Year 2025.

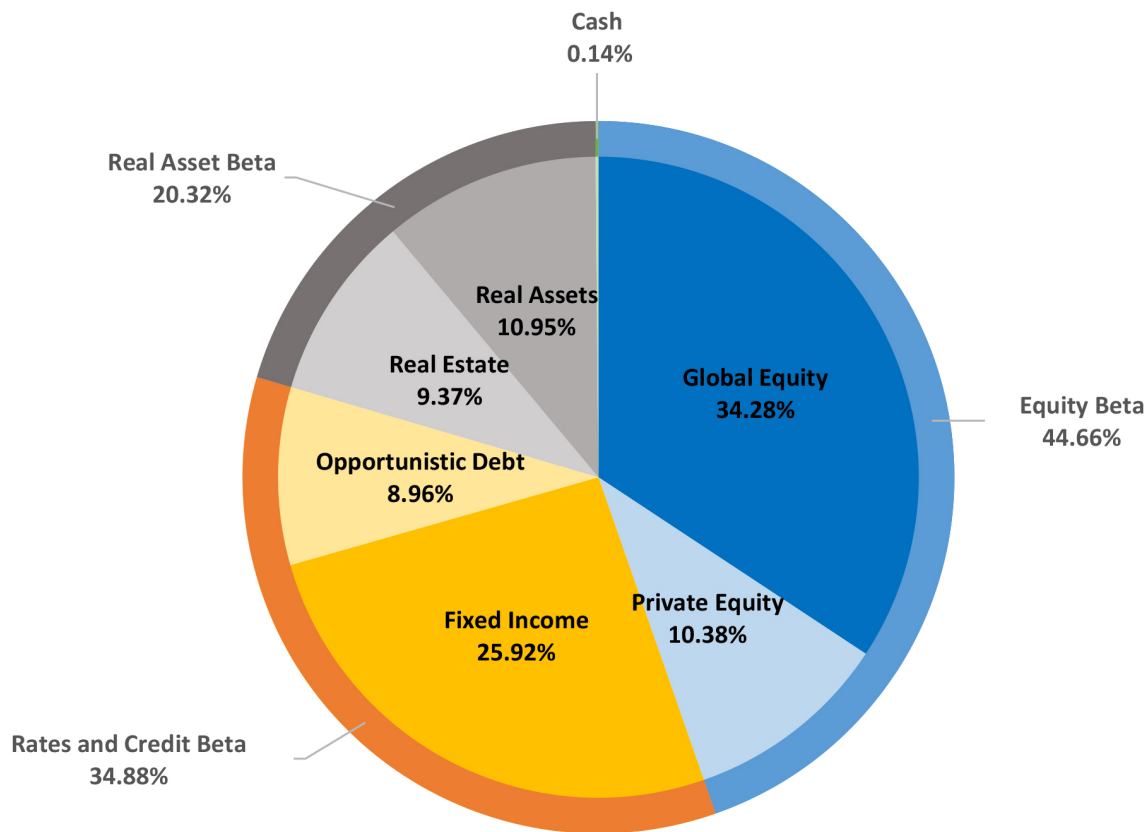
Real Assets

The underlying real asset allocation targets 10% of assets and includes a mix of natural resource strategies, infrastructure and transportation, and timber strategies. MPERS started the year with an 11.52% allocation, which decreased throughout the year and ended at 10.54%. The portfolio generated a 6.13% return for the year, slightly underperforming the policy benchmark's 6.77% return. The natural resources portfolio was up 0.68% on the year, gaining ground on negative performance from the year prior. MPERS' infrastructure strategies had another consistent year, producing a return of 5.43%. After rising 40.44% the previous year, the timber portfolio was up another 19.94% in Fiscal Year 2025, led by strong full or partial sales of various timber funds across the portfolio. The timber portfolio now has a five-year annualized return of 28.77%, which is the highest returning asset class over the past five years. The timber portfolio, which started out as a pilot program, has turned into a real differentiator within the broader real assets portfolio and has produced meaningful excess returns at the total fund level.

Looking Forward

MPERS' performance continues to look excellent across all time frames and performance metrics. These results prove that the investment portfolio has been an important element of MPERS' funding success over the last 20+ years. What is not clear from the numbers is the role MPERS' investment policies play in those results. Those investment policies provide flexibility to be opportunistic in all market environments. For instance, over the last few years, some public market investments have become more attractive when compared to private market alternatives. MPERS' investment policies afforded staff the flexibility to pivot away from private market investing to public market investing when the opportunity arose. That pivot to a “simpler is better” portfolio has been a good move for the portfolio's results. However, those policies also afford staff the ability to reverse that course when the best opportunities are in the private markets. Maintaining flexibility is paramount when thinking about how to preserve these great investment results going forward. Fortunately, MPERS has a governance model that provides staff with flexibility to adapt to changing investment markets. MPERS' diversified asset allocation is designed to perform well throughout a wide range of investment markets, and MPERS' staff is confident the portfolio is well positioned to meet the long-term goals of the System.

Asset Allocation



Amounts Reported by Beta Groups and Management-Type Allocation June 30, 2025

	Fair Value	Fair Value
Global Equity		
Global Public Equity	\$ 1,397,339,252	34.28%
Private Equity	422,914,847	10.38%
Rates and Credit		
Fixed Income	1,056,525,309	25.92%
Opportunistic Debt	365,074,256	8.96%
Real Assets		
Real Estate	382,001,468	9.37%
Real Assets	446,394,219	10.95%
Cash	6,005,256	0.14%
Total Investments	\$ 4,076,254,607	100.00%
Position:		
Less: Accrued Investment Interest and Income	\$ (10,966,902)	
Less: Investment Sales Receivable	(48,925,514)	
Plus: Investment Purchases Payable	85,073,939	
Currency Adjustment	—	
Total Investments	\$ 4,101,436,130	

Largest Equity Securities (Non-Commingled Funds)

Security	Fair Value	Percent of Total
GRANITE RIDGE RES INC COM	\$ 18,921,346	7.6862%
CF OWL ROCK TECHNOLOGY FINANCE CORP	11,095,254	4.5071
COASTAL FINL CORP WA COM NEW COM NEW	7,732,745	3.1412
NORTHEAST BK LEWISTON ME COM	5,632,088	2.2878
THIRD COAST BANCSHARES INC COM	5,528,091	2.2456
USCB FINL HLDGS INC CL A CL A	5,137,175	2.0868
CENTRAL BANCOMPANY COM USD0.01	5,124,600	2.0817
TIPTREE INC COM TIPTREE INC	4,930,531	2.0029
QCR HLDGS INC COM	4,506,863	1.8308
ARES CAP CORP COM	4,176,397	1.6965

Largest Fixed Income Securities (Non-Commingled Funds)

Par Value	Security	Fair Value
\$100,000,000	US TREASURY N/B 2% DUE 02-15-2050 REG	\$58,718,750
46,858,167	FNMA POOL #MA5615 6% 02-01-2055 BEO	47,634,887
41,331,000	FREDDIE MAC SR 5501 CL EB 6.0% 02-25-2055	43,526,346
39,085,449	GNMA 2025-001 REMIC PASS THRU 6.5% 01-20-2055	39,085,449
36,764,132	GNMA SR 25-105 CL AZ 5.0% 06-20-2055	36,764,132
28,980,000	GNMA SR 23-153 CL BY 6.0% 10-20-2053	30,601,634
34,449,154	GOVERNMENT NATIONAL MORTGAGE ASSN SR 25-60 DZ 4.5% 03-20-2055	29,970,071
24,775,107	GNMA SR 25-61 CL AZ 5% 04-20-2055	22,411,988
22,604,828	FREDDIE MAC SR 5428 CL ZY 5.5% 07-25-2054	22,342,542
20,000,000	NORTH CAROLINA HSG FIN AGY HOMEOWNERSHIPREV 6.322% 01-01-2056 BEO TAXABLE	20,421,706
20,095,869	FEDERAL HOME LN MTG CORP SR 5499 CL QY 5.5%02-25-2055	20,296,386
23,185,254	GNMA SR 25-34 CL DZ 4.0% 02-20-2055	20,002,071
21,660,176	GOVERNMENT NATIONAL MORTGAGE ASSN 5% 02-20-2053	19,517,971
20,150,281	GNMA SR 25-69 CL HZ 4.5% 04-20-2055	17,589,251
17,110,553	GNMA 6.0% DUE 11-20-2054	17,424,385
17,500,000	PVTPL SLM STUDENT LN TR 2012-8 SER 12-8 CL B FLTG RT DUE 04-28-2070 BEO	16,491,822
17,467,383	GNMA SR 25-41 CL CZ 5.0% 03-20-2055	15,976,353
15,000,000	MTN COML MTG TR FLTG RT 5.5569% DUE 03-15-2039	14,990,625
16,648,784	GNMA SR 70 CL GZ 5.0% 04-20-2055	14,973,847
15,441,464	FREDDIE MAC SER 5384 CL PZ 5.25% 11-25-2053	14,503,483

Space restrictions make it impractical to include the entire investment portfolio in this report. However, a portfolio listing is available for review in the office of the executive director of MPERS.

Investment Fees

Historically, MPERS has reported investment management fees and accrued incentive fees (performance fees), and in the last several years MPERS has expanded reporting to include fund pass-through expenses and portfolio company expenses. MPERS reports returns net of all fees and expenses; the additional fee categories reported have no impact on investment performance or returns. Comparing fees among peers is challenging given the lack of industry standard governing fee reporting. MPERS has taken a very conservative approach and reports all fees.

The strongest driver of fees is MPERS' asset allocation and use of private assets. Private assets have served an important role in MPERS' asset allocation including diversification and alpha generation. MPERS continues to monitor fees during the manager due diligence process and considers fees to be one factor when making investment decisions. MPERS strives to produce the highest net-of-fee returns regardless of the investment structure.

Summary of Investment Expenses For the Year Ended June 30, 2025

Investment Expenses

Management and Performance Fees by Asset Class

Equities	\$ 2,306,808
Fixed Income Core	20,646
Opportunistic Debt	12,720,334
Real Estate	3,263,928
Private Equity	12,750,296
Real Assets	1,279,543
Hedge Funds	2,070,869
Total Management and Performance Fees	\$34,412,424

Investment Custodial Fees	\$ 101,015
Performance Measurement	212,833
General Consultant (Monitoring) Fee	360,147
Professional Fees	361,724
Interest Expense	1,866,692
Other Fees / Expenses	(143,313)
Total Investment Expenses	<u>\$37,171,522</u>

Expenses Accrued, Fiscal Year 2025

Manager	Base Fees	Performance Fees	Pass Through Fund Expenses ⁽¹⁾	Portfolio Company Expenses ⁽²⁾	Total
ABRY Partners	\$ 5,297	\$ 60,565	\$ 6,808	\$ —	\$ 72,670
Aisling Capital	113,654	63,429	21,882	—	198,965
American Infrastructure	(8,333)	—	(3,615)	—	(11,948)
Anchorage Capital	121,239	817,732	—	—	938,971
Apollo Global Management	—	—	206	—	206
ARES	156,712	—	23,119	—	179,831
Arrowroot Capital	340,966	(1,028,149)	176,284	—	(510,899)
Banner Ridge Partners	1,564,468	2,365,003	71,535	—	4,001,006
Blackstone	2,107,432	625,781	—	—	2,733,213
Blackstone GSO	70,236	(111,036)	422,280	—	381,480
Blue Owl Capital (fka Owl Rock)	608,793	627,318	199,863	—	1,435,974
Blue Road	115,026	366,584	23,920	—	505,530
Carlyle Aviation Partners	40,286	222,139	—	—	262,424
CarVal	—	51,929	—	—	51,929
Catchmark	15,405	1,389,362	—	—	1,404,767
CBRE Investment Management (f/k/a CBRE	239,111	253,924	30,486	—	523,521
CenterSquare Investment Management,	957,798	—	—	—	957,798
CIM Group	329,742	(713,114)	179,038	—	(204,334)
Clarion Partners	9,217	—	193,433	—	202,650
Corrum Capital Management	239,657	109,755	167,410	—	516,821
DC Capital Partners	251,140	920,656	87,774	—	1,259,570
Drive Capital	800,190	4,590,583	12,921	—	5,403,694
Energy & Minerals Group (EMG)	411,726	(3,057,465)	42,689	—	(2,603,050)
Fortress	202,469	419,102	206,502	—	828,073
Francisco Partners	541,750	299,079	233,543	—	1,074,372
Grey Rock Energy	—	10,359	16,876	—	27,235
Grove Street Advisors	177,500	586,683	—	—	764,183
Heartwood Partners	125,909	90,157	20,428	—	236,494
Kennedy Capital Management	1,607,180	—	—	—	1,607,180
KKR	41,079	25,049	36,392	—	102,520
KPS Capital Partners	54,477	(1,174,365)	84,815	—	(1,035,073)
Long Ridge Equity	205,685	2,562,353	292,937	—	3,060,975
Longford Capital	490,674	1,462,035	124,348	—	2,077,057
Luxor Capital	3,714	—	—	—	3,714
Melange Capital Partners	205,833	155,631	—	—	361,464
Mercato Partners	293,810	502,077	—	—	795,887
MGG Investment Group	315,861	271,058	196,029	—	782,948
Miravast	186,477	76,997	16,049	—	279,523
Monomoy Capital Partners	61,813	87,118	67,408	—	216,339

Continued on next page.

(1) Fund Pass Through Expenses are administrative expenses charged to the fund and paid by the limited partners (or investors, including MPERS), in addition to the management fee. These expenses may include, but are not limited to, accounting, audit, legal, and custody expenses directly related to the administration of the underlying fund investments.

(2) Portfolio Company Expenses are fees or costs paid to the general partners (fund managers) of private equity funds which are not applied as offsets to gross management fees. These charges are paid by the underlying portfolio companies of the funds, and therefore, are indirectly paid by MPERS.

Expenses Accrued, Fiscal Year 2025 (continued)

Manager	Base Fees	Performance Fees	Pass Through Fund Expenses ⁽¹⁾	Portfolio Company Expenses ⁽²⁾	Total
New Mountain Capital	525,000	106,090	—	—	631,090
Nexus Capital	247,358	—	—	—	247,358
NGP	81,497	(70,447)	12,161	—	23,211
OCP Asia	493,742	(281,566)	496,493	—	708,669
OpenGate Capital	171,719	(1,231,504)	76,804	—	(982,981)
Orion Resource Partners	190,408	61,681	231,151	—	483,240
Parametric Portfolio Associates	313,268	—	—	—	313,268
Pfingsten Partners	41,153	(167,400)	4,549	—	(121,698)
PIMCO Management	105,030	178,810	—	—	283,840
Principal Financial	683,965	—	—	—	683,965
Quantum Energy Partners	126,524	(694,970)	43,824	—	(524,622)
RCP Advisors	300,000	—	381,720	—	681,720
Ridgewood Energy	299,282	(150,529)	63,367	—	212,120
Riverstone Credit Partners (aka Breakwall	89,879	(21,486)	209,623	—	278,016
Sculptor Capital	352,495	(15,782)	204,473	—	541,186
Shore Capital	—	—	44,059	—	44,059
Silver Point Capital	230,093	707,423	46,338	—	983,854
Stockdale Capital Partners	632,752	(1,406,803)	318,602	—	(455,449)
Timberland Investment Resources	399,817	(202,750)	—	—	197,067
Torchlight Investors	15,440	(133,998)	20,298	—	(98,260)
TPG NewQuest	158,954	—	24,599	—	183,553
Tristan Capital Partners	379,697	—	496,413	—	876,110
Turnbridge Capital	60,147	—	28,030	—	88,177
Varde Partners	114,452	192,262	26,308	—	333,022
Vectis - BPEA	—	1,784	(142,597)	—	(140,813)
Victory European Real Estate Group	47,546	—	8,568	—	56,114
Octagon Credit	2,928	—	—	—	2,928
Total Manager Expenses	\$ 19,067,138	\$ 9,799,142	\$ 5,546,143	\$ —	\$ 34,412,424
Professional Expenses					
Investment Custodial Fee	\$ 101,015	\$ —	\$ —	\$ —	\$ 101,015
Performance Management	212,833	—	—	—	212,833
General Consultant (Monitoring) Fee	360,147	—	—	—	360,147
Professional Fees	361,724	—	—	—	361,724
Interest Expense	1,866,692	—	—	—	1,866,692
Other Investment Expenses	(143,313)	—	—	—	(143,313)
Total Professional Expenses	\$ 2,759,098	\$ —	\$ —	\$ —	\$ 2,759,098
Total Investment Expenses	\$ 21,826,236	\$ 9,799,142	\$ 5,546,143	\$ —	\$ 37,171,522

(1) Fund Pass Through Expenses are administrative expenses charged to the fund and paid by the limited partners (or investors, including MPERS), in addition to the management fee. These expenses may include, but are not limited to, accounting, audit, legal, and custody expenses directly related to the administration of the underlying fund investments.

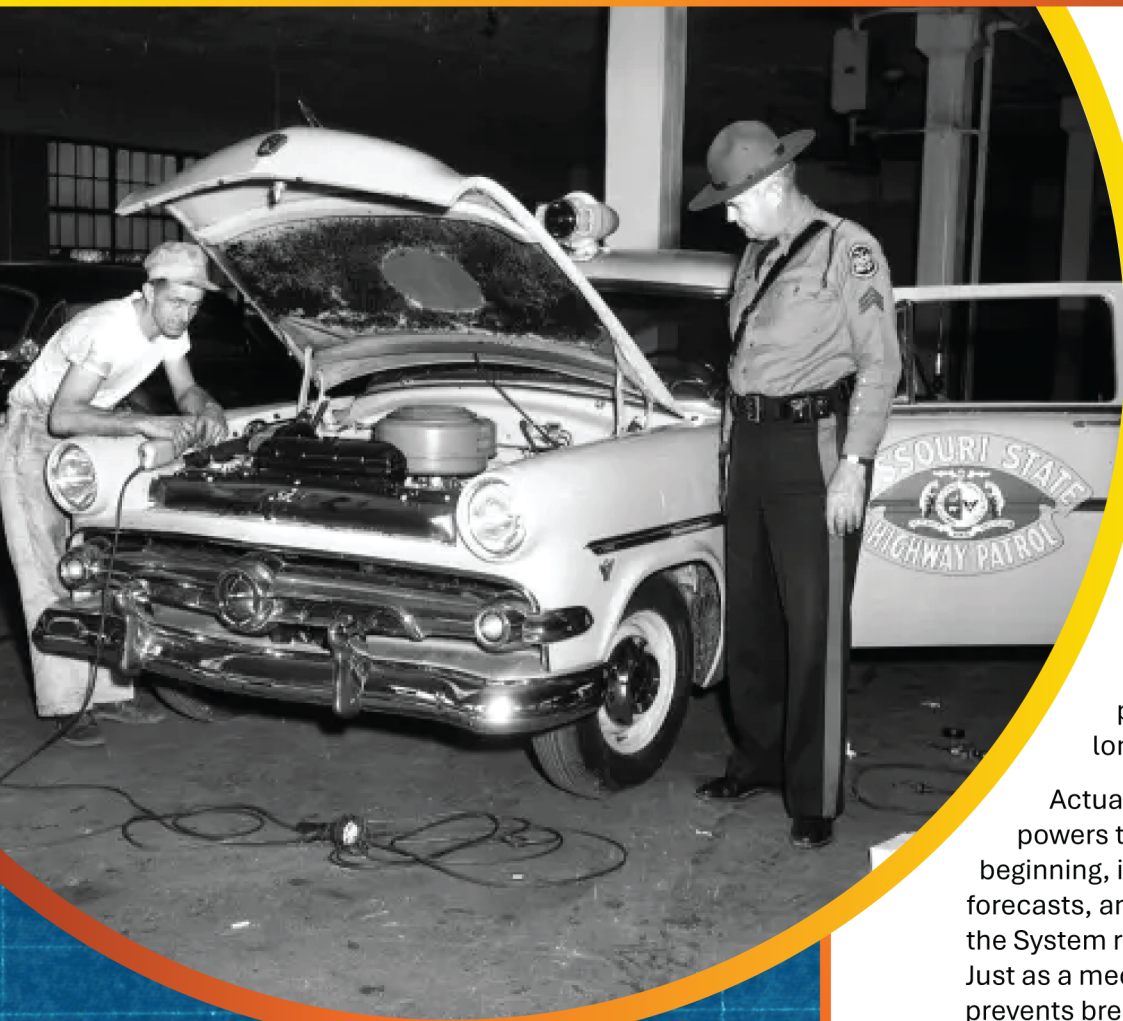
(2) Portfolio Company Expenses are fees or costs paid to the general partners (fund managers) of private equity funds which are not applied as offsets to gross management fees. These charges are paid by the underlying portfolio companies of the funds, and therefore, are indirectly paid by MPERS.

Investment Section | Schedule of Brokerage Commissions

Brokerage Firm	Commission	Shares	Rate
NATIONAL FINANCIAL SERVICES LLC	\$ 268,138	12,171,180	\$ 0.0220
NORTHERN TRUST SECURITIES, INC.	13,581	901,547	0.0151
RAYMOND JAMES & ASSOCIATES, INC.	6,542	592,378	0.0110
WELLS FARGO SECURITIES, LLC	5,624	562,364	0.0100
INTL FCSTONE FINANCIAL INC.	4,634	154,595	0.0300
STIFEL, NICOLAUS & COMPANY, INCORPORATED	3,272	7,741,885	0.0004
RAYMOND JAMES AND ASSOCIATES	943	37,493	0.0251
WELLS FARGO BANK, N.A.	671	20,121,907	0.0000
CITIGROUP GLOBAL MARKETS INC.	606	50,191,816	0.0000
ISI GROUP INC.	361	20,614	0.0175
INSTINET INVESTMENT SERVICES LIMITE	341	11,368	0.0300
ROBERT W. BAIRD CO. INCORPORATED	331	14,663	0.0226
INSTINET EUROPE LIMITED	320	39,684	0.0081
CACEIS BANK FRANCE	303	19,242	0.0157
BTIG, INC.	299	9,959	0.0300
RBC CAPITAL MARKETS, LLC	292	464,525,207	0.0000
SMBC NIKKO SECURITIES AMERICA INC.	282	10,655	0.0264
KEMPEN AND CO N.V.	280	7,042	0.0398
MIZUHO SECURITIES USA INC.	275	46,613,433	0.0000
All Others	3,848	9,533,532,079	0.0000
Total	<u>\$310,943</u>	<u>10,137,279,111</u>	
Average Commission Rate			<u>\$0.0000</u>

ACTUARIAL SECTION

The Mechanics of Stability



The Actuarial Engine Behind the Promise

In 1955, as Missouri State Highway Patrol mechanics tuned engines and maintained patrol vehicles, they ensured every part worked in harmony, with quiet reliability and with purpose. That same year, the retirement system was designed with the same philosophy: a system built on precision, balance, and long-term performance.

Actuarial science is the engine that powers the retirement plan. From the beginning, it has provided calculations, forecasts, and risk assessments to ensure the System remains solvent and sustainable. Just as a mechanic anticipates wear and prevents breakdowns, actuaries anticipate demographic shifts, economic changes, and funding needs.

In its formative years, MPERS was guided by a philosophy of cautious stewardship. Contributions were calculated with precision, and benefits were structured to reflect both fiscal responsibility and respect for public service. The System's early design prioritized sustainability, ensuring that even modest salaries translated into meaningful retirement support over time.

Image:

MSHP mechanics working on a patrol car, 1955

MODOT & PATROL EMPLOYEES'
RETIREMENT SYSTEM

70

ANNIVERSARY

1955 - 2025



September 10, 2025

Retirement Board
Missouri Department of Transportation
and Highway Patrol Employees' Retirement System
813 W Stadium Blvd
Jefferson City, Missouri 65109

Ladies and Gentlemen:

This report was prepared at the request of the Board and is intended for use by the Retirement System and those designated or approved by the Board. This report may be provided to parties other than the System only in its entirety and only with the permission of the Board. GRS is not responsible for unauthorized use of this report. This report should not be relied on for any purpose other than the purpose described.

The basic financial objective of the Missouri Department of Transportation and Highway Patrol Employees' Retirement System (MPERS) is to establish and receive contributions which:

- (1) When expressed in terms of percents of active member payroll, will remain approximately level from generation to generation of Missouri citizens; and
- (2) When combined with present assets and future investment returns, will be sufficient to meet the present and future financial obligations of MPERS.

In order to measure progress toward this fundamental objective, MPERS has annual actuarial valuations performed. The valuations: (i) measure the present financial position; and (ii) establish contribution rates that provide for the current cost and level percent-of-payroll amortization of unfunded actuarial liabilities over a reasonable period. An actuarial valuation was performed based upon benefit conditions, data and assumptions as of June 30, 2025. This valuation indicates that contribution rates for the period beginning July 1, 2026 that are at least equal to the calculated contribution rates will meet the Board's financial objective. The calculated contribution rates are 32.979% of payroll for the 5,883 Non-Uniformed employees and 58.000% of payroll for the 1,124 Uniformed Patrol employees.

The plan administrative staff provides the actuary with data for the actuarial valuation. The actuary relies on the data after reviewing it for internal and year to year consistency. Member data was not audited by the actuary. The actuary summarizes and tabulates population data in order to analyze longer term trends. We are not responsible for the accuracy or completeness of the data provided by MPERS.

Retirement Board
September 10, 2025
Page 2

Gabriel, Roeder, Smith & Company was responsible for the following schedules found in the Actuarial Section:

- Summary of Actuarial Assumptions and Methods
 - Probabilities of Separation from Active Employment
 - Individual Salary Increases
 - Joint Life Retirement Values
 - Probabilities of Retirement for Members
 - Probabilities of Disability for Members
- Summary of Member Data Included in Valuations
 - Active Members by Attained Age and Years of Service
 - Schedule of Active Member Valuation Data
- Solvency Test
- Derivation of Financial Experience
- Schedule of Retirees and Beneficiaries Added and Removed
- Summary of Plan Provisions
- Legislative Changes

Gabriel, Roeder, Smith & Company was responsible for the following schedules found in the Financial Section:

- Schedule of Changes in the Employer's Net Pension Liability
- Schedule of Employer's Net Pension Liability
- Schedule of Employer Contributions
- Schedule of the Actuarially Determined Contributions

Actuarial valuations are based upon assumptions regarding future activity in specific risk areas including the rates of investment return and payroll growth, eligibility for the various classes of benefits, and longevity among retired lives. These assumptions are adopted by the Board. The assumptions and the methods comply with the requirements of the Governmental Accounting Standards Board (GASB). Each actuarial valuation takes into account all prior differences between actual and assumed experience in each risk area and adjusts the contribution rates as needed. Actuarial methods and assumptions were adopted by the Board pursuant to the June 30, 2022 Experience Study. Gabriel, Roeder, Smith & Company has produced the following reports as of June 30, 2025:

- Annual Actuarial Valuation Report
- GASB Statement Nos. 67 and 68 Valuation Report

In order to gain a full understanding of the condition of this Plan, these reports should be read in their entirety.

To the best of our knowledge, this report is complete and accurate and was made in accordance with standards of practice promulgated by the Actuarial Standards Board. The assumptions and methods used for funding purposes meet the parameters set by Actuarial Standards of Practice. The actuarial assumptions used for this valuation produce results which, individually and in the aggregate, are reasonable. The combined effect of the assumptions is expected to have no significant bias (i.e., not significantly optimistic or pessimistic).

Retirement Board
September 10, 2025
Page 3

The employer contributions determined in this report are based on the Board funding policy. This policy is discussed on page 4 of the annual actuarial valuation report. We commend the Board for its aggressive monitoring and updating of the funding policy over the recent past. However, continued employer contributions at the current level do not guarantee benefit security. We, therefore, encourage the Board to continue to routinely monitor and update its funding policy and to continue to consider benefit security when doing so.

We have assessed that the contribution rate calculated under the current funding policy is a reasonable Actuarially Determined Employer Contribution (ADEC) and it is consistent with the plan accumulating adequate assets to make benefit payments when due.

The annual actuarial valuation report includes risk measures on pages A-13 and A-14, but does not include a more robust assessment of the risks of future experience not meeting the actuarial assumptions. Additional assessment of risks was outside the scope of this assignment. We recommend that the Board consider performing an analysis to assess risk related to investment and payroll.

This report was prepared using our proprietary valuation model and related software which in our professional judgment has the capability to provide results that are consistent with the purposes of the valuation and has no material limitations or known weaknesses. We performed tests to ensure that the model reasonably represents that which is intended to be modeled.

Future actuarial measurements may differ significantly from the current measurements presented in this report due to such factors as the following: plan experience differing from that anticipated by the economic or demographic assumptions; changes in economic or demographic assumptions; increases or decreases expected as part of the natural operation of the methodology used for these measurements (such as the end of an amortization period or additional cost or contribution requirements based on the plan's funded status); and changes in plan provisions or applicable law.

This report has been prepared by actuaries who have substantial experience valuing public employee retirement systems. Heidi G. Barry and Kevin T. Noelke are Members of the American Academy of Actuaries (MAAA) and meet the Qualification Standards of the American Academy of Actuaries to render the actuarial opinions contained herein.

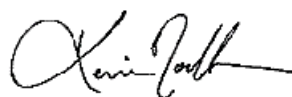
The signing actuaries are independent of the plan sponsor.

Based upon the valuation results, it is our opinion that the Missouri Department of Transportation and Highway Patrol Employees' Retirement System continues to operate in accordance with actuarial principles of level percent-of-payroll financing. It is important to the well-being of the System that it continues to receive contributions at the actuarially determined levels. It is also important to continue to monitor both the total funded status and the funded status of the retiree liabilities to ensure that the funding policy is consistent with the expected life span of the respective unfunded obligation.

Respectfully submitted,
Gabriel, Roeder, Smith & Company



Heidi G. Barry, ASA, FCA, MAAA



Kevin T. Noelke, ASA, FCA, MAAA

Actuarial Section | Summary of Actuarial Assumptions and Methods

Valuation Date	June 30, 2025
Actuarial Cost Method	Entry Age
Amortized Method	Closed, Level Percent-of-Payroll
Remaining Amortization Period	14 years
Asset Valuation Method	3-Year Smoothed Fair Value; 20% Corridor
Actuarial Assumptions:	
Investment Rate of Return	6.50%
Projected Salary Increase	3.00% to 10.50%
Cost-of-Living Adjustments	1.80% Compound
Includes Wage Inflation at	3.00%

An actuarial valuation is based upon an actuarial cost method, an asset valuation method, and actuarial assumptions. These methods and assumptions are chosen by the Board of Trustees after consultation with the Actuary and other advisors.

The actuarial cost method is called the Entry Age Actuarial Cost Method. This method is consistent with the Board's level percent-of-payroll funding objective. With this method, the level percent-of-payroll is determined that will fund a member's retirement benefit over the member's entire working lifetime, from date of hire (Entry Age) to date of exit from the active member population. Differences in the past between assumed and actual experience become part of unfunded actuarial accrued liabilities and are amortized with level percent-of-payroll contributions. This cost method was first used in the June 30, 1999 valuation.

The asset valuation method is a three-year smoothed fair value method in which assumed investment return is recognized immediately each year and differences between actual and assumed investment return are phased-in over a closed three-year period. This asset valuation method is intended to give recognition to the long-term accuracy of market values while filtering out and dampening short-term market swings. This method was first used in the June 30, 1999 valuation.

The actuarial assumptions used in producing the valuation fall into two broad classes: economic assumptions and demographic assumptions. Economic assumptions refer to long-term rates of investment return, wage growth, covered population growth, and inflation. Demographic assumptions refer to retirement rates, turnover rates, disability rates, merit and seniority pay increases, and mortality rates. The current assumptions are based upon a 2017-2022 study of experience. The assumptions are reviewed from time to time to keep them reasonably current with expected experience. The next experience study is scheduled to follow the June 30, 2027 valuation.

Economic Assumptions

The investment return rate used in making the valuation was 6.50% per year, compounded annually (net after administrative expenses). This rate of return is not the assumed real rate of return. The real rate of return over wage inflation is defined to be the portion of investment return which is more than the wage inflation rate. Considering wage inflation recognition of 3.00%, the 6.50% rate translates to an assumed real rate of return over wage inflation of 3.50%. This rate was first used for the June 30, 2021 valuation.

Pay increase assumptions for individual active members are shown on Table I. Part of the assumption for each year of service is for a merit and/or seniority increase, and the other 3.00% recognizes wage inflation. These rates were first used for the June 30, 2023 valuation.

Price Inflation is assumed to be 2.25%. The COLA is assumed to be 80% of the price inflation assumption. This results in a 1.80% annual COLA assumption (Closed Plan members hired prior to August 28, 1997 receive a minimum 4% COLA. These increases are made until the total of the increases reaches 65% of initial benefit at which time the increases will have the minimum removed). It is assumed that the 1.8% COLA will always be paid. All COLAs are assumed to be paid on the anniversary of retirement.

The active member group size is assumed to remain constant at its present level.

The active member payroll for all members is assumed to increase 3.00% annually.

Non-Economic Assumptions

Post-Retirement Healthy Mortality Rates are used to measure the probabilities of members dying after retirement. The rates currently in use are from the Pub-2010 General, Healthy Retiree, Amount-Weighted, Below-Median Income tables for males and females for Non-Uniformed members and Pub-2010 Public Safety Healthy Retiree, Amount-Weighted, tables for males and females for Uniformed members. Rates are decreased by 4% for non-uniform males and increased by 5% for uniform males. The assumed rates are adjusted for mortality improvement back to the observation period base year of 2010 and then projected generationally from 2010 to 2019 using scale MP-2021 and 90% of scale MP-2021 for years following 2019. Sample rates are shown on Tables II and III. These rates were first used in the June 30, 2023 valuation.

Post-Retirement Disabled Mortality Rates. The rates currently in use for disabled lives are the Pub-2010 General Disabled Retiree, Amount-Weighted tables for males and females for Non-Uniformed members and the Pub-2010 Public Safety Disabled Retiree, Amount-Weighted tables for males and females for Uniformed members. The assumed rates are adjusted for mortality improvement back to the observation period base year of 2010 and then projected generationally from 2010 to 2019 using scale MP-2021 and 90% of scale MP-2021 for years following 2019. Sample rates are shown on Table IV and V. These rates were first used in the June 30, 2023 valuation.

Pre-Retirement Mortality Rates. The rates currently in use for active lives are the Pub-2010 General, Employee, Amount-Weighted, Below-Median Income tables for males and females for Non-Uniformed members and the Pub-2010 Public Safety Employee, Amount-Weighted, tables for males and females for Uniformed members. The assumed rates are adjusted for mortality improvement back to the observation period base year of 2010 and then projected generationally from 2010 to 2019 using scale MP-2021 and 90% of scale MP-2021 for years following 2019. Sample rates are shown on Table VI and VII. These rates were first used in the June 30, 2023 valuation.

The probabilities of retirement for members eligible to retire are shown on Table IX. The rates for full retirement were first used in the June 30, 2023 valuation. The rates for reduced retirement were first used in the June 30, 2023 valuation. Upon retirement, members are assumed to pick the BackDROP period that when combined with the remaining annuity produces the highest liability.

The probabilities of disability for members eligible to retire are shown on Table X. The rates for disability were first used in the June 30, 2023 valuation.

The probabilities of withdrawal from service, death-in-service and disability are shown for sample ages on Table XI. The death-in-service and disability rates were first used in the June 30, 2023 valuation. The withdrawal rates were first used in the June 30, 2023 valuation.

The data about persons now covered and about present assets was furnished by the System's administrative staff. Although examined for general reasonableness, the data was not audited by the Actuary. Data was furnished as of May 31 and assumed to be statistically equivalent to June 30.

The actuarial valuation computations were made by or under the supervision of a Member of the American Academy of Actuaries (MAAA).

Probabilities of Separation From Active Employment Less Than 5 Years of Service

Service	MoDOT, Civilian Patrol, and MPERS		Uniformed Patrol	
	Male	Female	Male	Female
0 – 1	28.00%	22.00%	10.00%	10.00%
1 – 2	18.50%	15.00%	6.00%	6.00%
2 – 3	12.50%	14.00%	3.25%	3.25%
3 – 4	9.00%	12.00%	3.00%	3.00%
4 – 5	8.00%	7.00%	2.75%	2.75%

Probabilities of Separation From Active Employment More Than 5 Years of Service

Age	MoDOT, Civilian Patrol, and MPERS		Uniformed Patrol	
	Male	Female	Male	Female
25	9.04%	10.40%	3.51%	3.51%
30	8.05%	9.43%	3.51%	3.51%
35	6.48%	7.49%	2.49%	2.49%
40	5.04%	5.73%	1.47%	1.47%
45	3.78%	4.63%	1.02%	1.02%
50	2.76%	3.94%	0.59%	0.59%
55	2.02%	3.71%	0.30%	0.30%
60	1.64%	3.71%	0.22%	0.22%

Salary Increase Assumptions
Service Based Salary Scale
% Merit Increases in Salaries Next Year

Service Index	MoDOT, Civilian Patrol, and MPERS Rate	Uniformed Patrol Rate
1	7.50%	6.00%
2	3.80%	4.00%
3	2.80%	3.00%
4	1.50%	2.00%
5	1.00%	2.00%
6	0.80%	1.90%
7	0.00%	1.80%
8	0.00%	1.70%
9	0.00%	1.60%
10	0.00%	1.50%
11	0.00%	1.40%
12	0.00%	1.30%
13	0.00%	1.20%
14	0.00%	1.10%
15	0.00%	1.00%
16	0.00%	0.90%
17	0.00%	0.85%
18	0.00%	0.70%
19	0.00%	0.60%
20	0.00%	0.50%
21	0.00%	0.00%
22	0.00%	0.00%
23	0.00%	0.00%
24	0.00%	0.00%
25	0.00%	0.00%

Joint Life Retirement Values (6.50% Interest)

Non-Uniformed

Sample Attained Ages	Present Value of \$1 Monthly for Life		Percent Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women	Men	Women
50	\$155.79	\$164.83	0.6539%	0.3792%	32.79	37.17
55	148.15	158.30	0.8156%	0.4552%	28.45	32.50
60	138.75	149.78	1.0477%	0.5417%	24.23	27.88
65	126.98	138.53	1.2468%	0.6538%	20.11	23.31
70	112.21	124.13	1.8327%	1.0289%	16.12	18.85
75	95.35	107.04	2.9225%	1.7912%	12.46	14.69
80	77.34	87.99	4.9854%	3.2744%	9.25	10.97

Uniformed

Sample Attained Ages	Present Value of \$1 Monthly for Life		Percent Dying Next Year		Future Life Expectancy (years)	
	Men	Women	Men	Women	Men	Women
50	\$163.32	\$166.78	0.1905%	0.1345%	35.07	37.53
55	154.49	158.81	0.3029%	0.2498%	30.06	32.46
60	143.36	148.94	0.5376%	0.4533%	25.22	27.58
65	129.99	136.99	0.9185%	0.7243%	20.66	22.94
70	114.28	122.58	1.5069%	1.1500%	16.41	18.56
75	96.36	105.74	2.5973%	1.9782%	12.53	14.50
80	77.20	87.32	4.7106%	3.5465%	9.15	10.89

The present values shown above are for illustrative purposes only. They are straight life amounts and do not include the value of future post-retirement increases.

**Percent of Eligible Active Members Retiring Next Year
(Rates of Retirement)**

Closed and Year 2000 Plans

Age	MoDOT, Civilian Patrol, and MPERS				Uniformed Patrol
	Male		Female		Normal
	Normal	Early	Normal	Early	
50	39.00%	0.00%	25.00%	0.00%	45.00%
55	25.00%	3.00%	28.00%	3.00%	26.00%
60	21.00%	5.00%	23.00%	5.00%	100.00%
65	30.00%	0.00%	39.00%	0.00%	100.00%
70	40.00%	0.00%	50.00%	0.00%	100.00%

Year 2000 – 2011 Tier

Age	MoDOT, Civilian Patrol, and MPERS			Uniformed Patrol
	Normal		Early	Normal
	Age & Service	Rule of 90		
55	0.00%	30.00%	0.00%	30.00%
60	0.00%	30.00%	0.00%	100.00%
65	0.00%	30.00%	10.00%	100.00%
70	100.00%	100.00%	0.00%	100.00%

**Percent of Members Becoming Disabled at the Indicated Age
(Rates of Disability)**

Age	MoDOT, Civilian Patrol, and MPERS		Uniformed Patrol	
	Male	Female	Male	Female
25	0.08%	0.08%	0.10%	0.10%
30	0.09%	0.09%	0.10%	0.10%
35	0.12%	0.12%	0.10%	0.10%
40	0.16%	0.16%	0.10%	0.10%
45	0.26%	0.26%	0.10%	0.10%
50	0.43%	0.43%	0.10%	0.10%
55	0.82%	0.82%	0.10%	0.10%
60	1.41%	1.41%	0.10%	0.10%

Schedule of Funding Progress

Year Ending June 30	Actuarial Asset Value	Entry Age Accrued Liability	Unfunded Accrued Liability	Funded Ratio	Actuarial Covered Payroll ⁽¹⁾	UAAL as a Percentage of Covered Payroll
2016	\$2,086,654,348	\$3,761,733,004	\$1,675,078,656	55.47%	\$344,275,147	486.55%
2017	2,172,787,144	3,802,443,730	1,629,656,586	57.14%	356,142,973	457.58%
2018 ⁽²⁾	2,274,248,122	3,981,838,941	1,707,590,819	57.12%	353,371,000	483.23%
2019	2,415,343,431	4,037,369,708	1,622,026,277	59.82%	362,356,771	447.63%
2020	2,481,329,531	4,092,097,897	1,610,768,366	60.64%	363,572,158	443.04%
2021 ⁽²⁾	2,711,272,503	4,344,072,912	1,632,800,409	62.41%	358,987,667	454.83%
2022	2,925,561,398	4,410,685,047	1,485,123,649	66.33%	366,743,306	404.95%
2023 ⁽²⁾	3,247,983,333	4,709,391,407	1,461,408,074	68.97%	400,360,785	365.02%
2024	3,504,129,658	4,963,323,460	1,459,193,802	70.60%	438,548,450	332.73%
2025	3,858,076,680	5,098,039,114	1,239,962,434	75.68%	471,394,514	263.04%

(1) Values are estimated from contribution rate and amount.

(2) New assumptions and/or methods adopted.

See Note 5 of Notes to the Financial Statements in the Financial Section for funding policy information.

Member and Employer Contribution Rates

Year Ended June 30	Employer Contributions All Benefit Structures		Member Contributions 2011 Tier All Groups
	Uniformed Patrol Group	Non-Uniformed Group	
2016	57.760%	58.050%	4.00%
2017	58.000%	58.000%	4.00%
2018	58.000%	58.000%	4.00%
2019	58.000%	58.000%	4.00%
2020	58.000%	58.000%	4.00%
2021	58.000%	58.000%	4.00%
2022	58.000%	58.000%	4.00%
2023	58.651%	58.000%	4.00%
2024	58.000%	58.000%	4.00%
2025	58.491%	52.008%	4.00%

See Required Supplementary Information, Schedule of Employers' Contributions for more information.

Actuarial Section | Summary of Member Data Included in Valuations

	Non-Uniformed				
	Civilian Patrol	MoDOT and MPERS	Non-Uniformed Total	Uniformed Patrol	Grand Total
Active Members					
Closed Plan	122	624	746	206	952
Year 2000 Plan (Closed)	286	1,147	1,433	345	1,778
Year 2000 Plan – 2011 Tier (Open)	700	3,004	3,704	573	4,277
Total Active Members	1,108	4,775	5,883	1,124	7,007
Total Active Members Prior Year	1,048	4,715	5,763	1,116	6,879
Retiree – Regular Pensioners					
Closed Plan	465	2,916	3,381	1,200	4,581
Year 2000 Plan (Closed)	735	4,320	5,055	16	5,071
Year 2000 Plan – 2011 Tier (Open)	24	68	92	2	94
Total Regular Pensioners	1,224	7,304	8,528	1,218	9,746
Self Insured Disability Pensioners	1	28	29	3	32
Fully Insured Disability Pensioners	7	59	66	3	69
Terminated Vested Members	274	1,773	2,047	164	2,211
Total	2,614	13,939	16,553	2,512	19,065
Active Member Valuation Payroll	\$ 67,429,078	\$ 289,696,214	\$ 357,125,292	\$ 110,994,757	\$ 468,120,049
Active Member Valuation Payroll (Prior Year)	\$ 60,191,438	\$ 276,011,787	\$ 336,203,225	\$ 102,100,197	\$ 438,303,422
Unfunded Actuarial Accrued Liability	N/A	N/A	\$ 769,084,084	\$ 470,878,350	\$1,239,962,434

Member data for actuarial valuation is as of May 31, 2025.

MoDOT and MPERS

Closed Plan

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	—	—	—	—	—	—	—	—	\$ —
20 – 24	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—
35 – 39	—	—	—	—	—	—	—	—	—
40 – 44	—	—	—	—	—	1	—	1	86,534
45 – 49	—	1	1	2	4	106	1	115	8,612,954
50 – 54	—	2	3	2	4	153	43	207	16,914,118
55 – 59	—	1	5	4	8	74	88	180	14,763,417
60 – 64	1	1	3	1	2	34	43	85	6,683,490
65 – 69	—	1	—	—	1	10	18	30	2,209,888
70+	—	—	—	—	—	2	4	6	499,716
Totals	1	6	12	9	19	380	197	624	\$49,770,117

Average Age 54.8 years
 Average Service 28.6 years
 Average Pay \$79,760

Year 2000 Plan

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	—	—	—	—	—	—	—	—	\$ —
20 – 24	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—
35 – 39	6	3	9	53	—	—	—	71	4,608,355
40 – 44	8	7	15	120	72	—	—	222	15,396,731
45 – 49	7	7	21	86	163	2	—	286	21,248,872
50 – 54	4	9	16	73	116	5	—	223	15,556,288
55 – 59	9	11	12	69	92	6	—	199	12,309,404
60 – 64	1	6	5	44	51	3	—	110	7,086,660
65 – 69	1	—	2	13	10	1	—	27	1,612,454
70+	—	1	1	3	4	—	—	9	580,609
Totals	36	44	81	461	508	17	—	1,147	\$78,399,373

Average Age 50.2 years
 Average Service 18.7 years
 Average Pay \$68,352

Member data for actuarial valuation is as of May 31, 2025.

Actuarial Section | Active Members by Attained Age and Years of Service

MoDOT and MPERS Year 2000 Plan – 2011 Tier

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	14	—	—	—	—	—	—	14	\$ 577,700
20 – 24	283	3	—	—	—	—	—	286	13,006,547
25 – 29	335	77	—	—	—	—	—	412	22,221,908
30 – 34	232	210	47	—	—	—	—	489	28,250,208
35 – 39	205	149	78	—	—	—	—	432	24,233,954
40 – 44	166	111	69	—	—	—	—	346	18,416,558
45 – 49	122	102	44	—	—	—	—	268	15,094,865
50 – 54	145	88	42	—	—	—	—	275	14,556,634
55 – 59	122	83	34	—	—	—	—	239	12,491,681
60 – 64	77	57	44	—	1	—	—	179	9,298,950
65 – 69	26	18	15	—	—	—	—	59	3,099,543
70+	2	2	1	—	—	—	—	5	278,177
Totals	1,729	900	374	—	1	—	—	3,004	\$ 161,526,725
Average Age					39.8 years				
Average Service					4.8 years				
Average Pay					\$53,771				

Member data for actuarial valuation is as of May 31, 2025.

Uniformed Patrol

Closed Plan

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	—	—	—	—	—	—	—	—	\$ —
20 – 24	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—
35 – 39	—	—	—	—	—	—	—	—	—
40 – 44	—	—	1	—	—	—	—	1	81,255
45 – 49	—	—	—	—	—	25	—	25	2,956,104
50 – 54	—	—	—	—	2	81	33	116	13,938,806
55 – 59	1	—	—	—	—	25	37	63	7,426,070
60 – 64	—	—	—	—	—	—	1	1	103,352
65 – 69	—	—	—	—	—	—	—	—	—
70+	—	—	—	—	—	—	—	—	—
Totals	1	—	1	—	2	131	71	206	\$24,505,587

Average Age 52.9 years
 Average Service 28.9 years
 Average Pay \$118,959

Year 2000 Plan

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	—	—	—	—	—	—	—	—	\$ —
20 – 24	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—
35 – 39	—	—	5	43	—	—	—	48	5,174,537
40 – 44	—	—	—	81	25	—	—	106	11,754,052
45 – 49	—	1	2	21	92	4	—	120	13,591,095
50 – 54	—	—	—	19	33	5	—	57	6,381,791
55 – 59	—	—	—	4	9	—	—	13	1,417,584
60 – 64	—	—	—	—	1	—	—	1	97,196
65 – 69	—	—	—	—	—	—	—	—	—
70+	—	—	—	—	—	—	—	—	—
Totals	—	1	7	168	160	9	—	345	\$38,416,255

Average Age 45.2 years
 Average Service 19.7 years
 Average Pay \$111,351

Member data for actuarial valuation is as of May 31, 2025.

Uniformed Patrol Year 2000 Plan – 2011 Tier

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	—	—	—	—	—	—	—	—	\$ —
20 – 24	53	—	—	—	—	—	—	53	4,233,334
25 – 29	106	45	—	—	—	—	—	151	11,784,403
30 – 34	51	88	33	—	—	—	—	172	14,280,243
35 – 39	28	29	85	—	—	—	—	142	12,767,191
40 – 44	5	5	23	—	—	—	—	33	3,015,636
45 – 49	1	3	13	—	—	—	—	17	1,581,869
50 – 54	1	1	1	—	—	—	—	3	236,264
55 – 59	—	1	1	—	—	—	—	2	173,977
60 – 64	—	—	—	—	—	—	—	—	—
65 – 69	—	—	—	—	—	—	—	—	—
70+	—	—	—	—	—	—	—	—	—
Totals	245	172	156	—	—	—	—	573	\$48,072,917

Average Age 32.2 years
Average Service 6.6 years
Average Pay \$83,897

Member data for actuarial valuation is as of May 31, 2025.

Civilian Patrol

Closed Plan

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	—	—	—	—	—	—	—	—	\$ —
20 – 24	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—
35 – 39	—	—	—	—	—	—	—	—	—
40 – 44	—	—	—	—	—	—	—	—	—
45 – 49	—	1	—	—	2	18	2	23	1,595,654
50 – 54	1	1	1	—	—	30	8	41	2,941,771
55 – 59	—	—	2	2	1	10	14	29	2,193,643
60 – 64	—	—	1	1	2	6	11	21	1,493,457
65 – 69	—	—	—	—	—	3	2	5	274,865
70+	—	—	—	—	—	1	2	3	219,128
Totals	1	2	4	3	5	68	39	122	\$8,718,518

Average Age 55.2 years
 Average Service 28.1 years
 Average Pay \$71,463

Year 2000 Plan

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	—	—	—	—	—	—	—	—	\$ —
20 – 24	—	—	—	—	—	—	—	—	—
25 – 29	—	—	—	—	—	—	—	—	—
30 – 34	—	—	—	—	—	—	—	—	—
35 – 39	—	—	5	15	—	—	—	20	1,428,053
40 – 44	3	1	7	31	19	—	—	61	4,490,448
45 – 49	—	3	5	23	33	—	—	64	5,019,417
50 – 54	2	—	1	19	23	2	—	47	3,202,629
55 – 59	1	6	5	23	23	—	—	58	3,811,744
60 – 64	1	1	2	13	11	—	—	28	1,702,794
65 – 69	—	—	—	4	2	—	—	6	419,346
70+	2	—	—	—	—	—	—	2	84,371
Totals	9	11	25	128	111	2	—	286	\$20,158,802

Average Age 50.1 years
 Average Service 18.2 years
 Average Pay \$70,485

Member data for actuarial valuation is as of May 31, 2025.

Civilian Patrol Year 2000 Plan – 2011 Tier

Attained Age	Counted by Complete Years of Service to Valuation Date							Totals	
	0 – 4	5 – 9	10 – 14	15 – 19	20 – 24	25 – 29	30+	No.	Valuation Payroll
< 20	1	—	—	—	—	—	—	1	\$ 38,630
20 – 24	50	—	—	—	—	—	—	50	2,452,479
25 – 29	94	14	—	—	—	—	—	108	5,903,622
30 – 34	64	57	11	—	—	—	—	132	7,622,685
35 – 39	38	22	37	—	—	—	—	97	5,941,633
40 – 44	19	16	19	—	—	—	—	54	3,101,788
45 – 49	23	21	18	—	—	—	—	62	3,411,697
50 – 54	23	21	13	—	—	—	—	57	3,028,579
55 – 59	38	16	19	—	—	—	—	73	3,802,666
60 – 64	23	14	10	—	—	—	—	47	2,271,306
65 – 69	5	2	11	—	—	—	—	18	921,838
70+	—	—	1	—	—	—	—	1	54,836
Totals	378	183	139	—	—	—	—	700	\$38,551,759
Average Age					40.5 years				
Average Service					5.5 years				
Average Pay					\$55,074				

Member data for actuarial valuation is as of May 31, 2025.

Actuarial Section | Active Member Valuation Data

Actuarial Valuation for June 30	Number of Participating Employers	Number of Active Members	Covered Payroll	Average Pay	Percent Change in Average Pay from Prior Year
2016	3	7,441	\$339,799,379	\$45,666	0.5%
2017	3	7,456	348,979,212	46,805	2.5%
2018	3	7,391	351,496,555	47,557	1.6%
2019	3	7,421	359,296,056	48,416	1.8%
2020	3	7,355	360,851,545	49,062	1.3%
2021	3	7,219	355,194,571	49,203	0.3%
2022	3	6,874	356,662,243	51,886	5.5%
2023	3	6,621	389,324,744	58,802	13.3%
2024	3	6,879	438,303,422	63,716	8.4%
2025	3	7,007	468,120,049	66,807	4.9%
Ten-Year Average					4.0%

Member data for actuarial valuation is as of May 31, 2025.

Actuarial Section | Solvency Test

The MPERS funding objective is to meet long-term benefit promises through contributions that remain approximately level from year to year as a percent of member payroll. If the contributions to the System are level in concept and soundly executed, the System will pay all promised benefits when due – the ultimate test of financial soundness.

A solvency test is one means of checking a system's progress under its funding program. In a solvency test for a non-contributory plan, the plan's present assets (cash and investments) are compared with: 1) The liabilities for future benefits to present retired lives and 2) The liabilities for service already rendered by members. In a system that has been following the discipline of level percent-of-payroll financing, the liabilities for future benefits to present retired lives (liability 1) will be fully covered by present assets (except in rare circumstances). In addition, the liabilities for service already rendered by members (liability 2) will be partially covered by the remainder of present assets. The larger the funded portion of liability 2, the stronger the condition of the system.

The schedule below illustrates the history of liability 2 of the System.

Valuation Date June 30	(1) Member Contributions	(2) Retirees and Beneficiaries	(3) Active and Inactive Members	Present Valuation Assets	Portion of Present Values Covered by Present Assets			
	Millions				(1)	(2)	(3)	Total
2016	\$ 5	\$2,470	\$1,287	\$2,087	100%	84%	—%	55%
2017	8	2,488	1,306	2,173	100%	87%	—%	57%
2018*	11	2,598	1,373	2,274	100%	87%	—%	57%
2019	14	2,656	1,367	2,415	100%	90%	—%	60%
2020	18	2,726	1,348	2,481	100%	90%	—%	61%
2021*	21	2,882	1,441	2,711	100%	93%	—%	62%
2022	24	2,952	1,435	2,926	100%	98%	—%	66%
2023*	29	3,120	1,560	3,248	100%	100%	6%	69%
2024	36	3,269	1,658	3,504	100%	100%	12%	71%
2025	44	3,369	1,685	3,858	100%	100%	26%	76%

*New Assumptions and/or methods.

Actuarial Section | Derivation of Financial Experience

Actual experience will never coincide exactly with assumed experience (except by coincidence). Gains and losses may offset each other over a period of years, but sizable year-to-year variations from assumed experience are common. Detail on the derivation of the experience gain (loss) is shown below.

UAAL Beginning of Year (at July 1)	\$1,459,193,802
Normal Cost	62,269,803
Transfer In and Service Purchase – Liability	4,995,386
Contributions	(267,193,851)
Interest	88,349,917
Net Change in LTD Assets	—
Expected UAAL Before Any Changes	1,347,615,057
Effect of Benefit Changes	—
Effect of Changes of Assumptions and Methods	—
Effect of Adjustment	—
Expected UAAL After Changes	1,347,615,057
End of Year UAAL (at June 30)	\$1,239,962,434
Gain/(Loss) for Year	\$ 107,652,623
Gain/(Loss) as a percent of actuarial accrued liabilities at start of year (\$4,963.3 million)	2.2 %

Valuation Date June 30	Experience Gain (Loss) as % of Beginning Accrued Liability
2016	1.1 %
2017	0.1 %
2018	0.6 %
2019	0.7 %
2020	(1.2)%
2021	3.6 %
2022	1.9 %
2023	(0.6)%
2024	(2.5)%
2025	2.2 %

Actuarial Section | Schedule of Retirees and Beneficiaries Added and Removed

	Added to Rolls		Removed from Rolls		Rolls End of Year			% Increase	
Valuation Date	Number	Annual Allowances	Number	Annual Allowances	Number	Annual Allowances	Average Annual Allowances	Annual Allowance	Average Annual Allowance
FY2025									
Retirees	373	\$ 5,979,902	251	\$ 4,819,686	7,875	\$239,273,235	\$ 30,384	3.90 %	2.29 %
Beneficiaries	152	2,151,669	120	\$ 1,576,512	1,961	46,506,094	23,715	3.83 %	2.19 %
Disabilities	8	—	27	\$ 11,254	102	830,243	8,140	1.56 %	20.49 %
FY2024									
Retirees	376	\$ 5,218,015	220	\$ 3,401,886	7,753	\$230,284,946	\$ 29,703	5.28 %	3.17 %
Beneficiaries	119	1,483,601	116	1,400,911	1,929	44,790,301	23,207	6.56 %	6.34 %
Disabilities	19	—	25	27,092	121	817,496	6,756	(3.59)%	1.98 %
FY2023									
Retirees	392	\$ 5,767,290	239	\$ 3,459,294	7,597	\$218,727,201	\$ 28,791	4.52 %	2.42 %
Beneficiaries	146	1,650,536	138	1,500,200	1,926	42,033,928	21,824	4.13 %	3.69 %
Disabilities	18	—	15	—	127	847,936	6,625	3.04 %	(1.78)%
FY2022									
Retirees	430	\$ 5,592,522	240	\$ 4,287,730	7,444	\$209,268,115	\$ 28,112	1.67 %	(0.93)%
Beneficiaries	136	1,815,705	127	1,538,452	1,918	40,367,666	21,047	4.03 %	3.55 %
Disabilities	18	—	22	12,610	124	822,885	6,745	(2.42)%	2.38 %
FY2021									
Retirees	335	\$ 4,388,320	289	\$ 4,630,165	7,254	\$205,830,949	\$ 28,375	1.21 %	0.57 %
Beneficiaries	161	2,092,581	131	1,421,420	1,909	38,802,739	20,326	4.31 %	2.67 %
Disabilities	14	—	25	6,652	128	843,262	6,588	0.46 %	9.09 %
FY2020									
Retirees	339	\$ 4,389,004	204	\$ 360,775	7,208	\$203,365,258	\$ 28,214	2.39 %	0.53 %
Beneficiaries	129	1,441,941	122	1,316,530	1,879	37,200,605	19,798	3.35 %	2.64 %
Disabilities	7	—	26	750	139	839,398	6,039	(1.93)%	0.89 %
FY2019									
Retirees	308	\$ 4,104,217	187	\$ 2,746,320	7,077	\$198,618,027	\$ 28,065	2.54 %	0.78 %
Beneficiaries	133	1,424,022	130	1,211,576	1,866	35,993,556	19,289	3.04 %	2.87 %
Disabilities	22	—	27	31,787	143	855,947	5,986	1.26 %	4.80 %
FY2018									
Retirees	311	\$ 3,842,195	201	\$ 2,780,558	6,956	\$193,705,411	\$ 27,847	1.96 %	0.34 %
Beneficiaries	112	1,103,494	124	855,794	1,863	34,930,984	18,750	1.97 %	2.62 %
Disabilities	18	—	25	26,921	148	845,327	5,712	(2.82)%	2.44 %
FY2017									
Retirees	352	\$ 4,642,501	196	\$ 3,023,457	6,846	\$189,990,373	\$ 27,752	1.29 %	(1.02)%
Beneficiaries	127	1,536,955	134	1,099,249	1,875	34,257,599	18,271	3.49 %	3.88 %
Disabilities	24	—	24	15,898	155	869,833	5,576	(3.92)%	(4.54)%
FY2016									
Retirees	300	\$ 3,820,071	193	\$ 3,032,208	6,690	\$187,571,039	\$ 28,038	2.31 %	0.68 %
Beneficiaries	129	1,205,294	121	889,494	1,882	33,100,896	17,588	3.18 %	2.74 %
Disabilities	20	—	29	5,787	155	905,306	5,841	0.21 %	6.05 %

New disabilities are covered/paid by The Standard Insurance Co.

Data of this chart is as of June 30, 2025.

Comparison of the Closed Plan, the Year 2000 Plan, and the Year 2000 Plan – 2011 Tier For the Year Ended June 30, 2025

Plan Provision	Closed Plan	Year 2000 Plan	Year 2000 Plan - 2011 Tier
Membership Eligibility	Members hired prior to July 1, 2000, who became vested, and worked or continue to work in a position normally requiring at least 1,040 hours of work annually.	- Members hired for the first time on or after July 1, 2000, in a position normally requiring at least 1,040 hours of work annually. - Members who left state employment prior to becoming vested and return to work (for 12 continuous months) on or after July 1, 2000, in a position normally requiring at least 1,040 hours of work annually.	Members hired for the first time on or after January 1, 2011, in a position normally requiring at least 1,040 hours of work annually.
Normal Retirement Eligibility	- Age 65 & active with 4 years of service. - Age 65 with 5 years of service. - Age 60 with 15 years of service. - Rule of 80 / minimum age 48. <u>Uniformed Members Only:</u> - Age 55 & active with 4 years of service. - Age 55 with 5 years of service. - Mandatory retirement at age 60; no minimum service requirement (active only).	- Age 62 with 5 years of service. - Rule of 80 / minimum age 48 (active only). <u>Uniformed Members Only:</u> - Mandatory retirement at age 60; no minimum service requirement (active only).	- Age 67 with 5 years of service. - Rule of 90 / minimum age 55 (active only). <u>Uniformed Members Only:</u> - Age 55 & active with 5 years of service (active only). - Mandatory retirement at age 60; no minimum service requirement (active only).
Early (Reduced) Retirement Eligibility	Age 55 with 10 years of creditable service.	Age 57 with 5 years of creditable service.	Age 62 with 5 years of creditable service (active only).
Life Benefit	1.6% x FAP** x service (base benefit is increased by 33½% for uniformed patrol members only).	1.7% x FAP** x service	1.7% x FAP** x service
Temporary Benefit	Not available.	0.8% x FAP** x service Until age 62, only if retiring under normal retirement eligibility provision.	0.8% x FAP** x service Until age 62, only if retiring under normal retirement eligibility provision.
Special Benefit	<u>Uniformed Members Only:</u> \$90/mo payable until age 65, offset by any amount earned from gainful employment (does not apply if hired on or after January 1, 1995).	Not available.	Not available.
Death Benefit	\$5,000 benefit paid to named beneficiary - Available to active employees or LTD recipients who retired after September 28, 1985. - Available to work-related disability recipients after September 28, 1985.	\$5,000 benefit paid to named beneficiary - Available to active employees or LTD recipients who retire. - Available to work-related disability recipients.	\$5,000 benefit paid to named beneficiary - Available to active employees or LTD recipients who retire. - Available to work-related disability recipients.

Comparison of the Closed Plan, the Year 2000 Plan, and the Year 2000 Plan – 2011 Tier For the Year Ended June 30, 2025 (continued)

Plan Provision	Closed Plan	Year 2000 Plan	Year 2000 Plan - 2011 Tier
Vesting	5 years of service.	5 years of service.	5 years of service, if active on or after January 1, 2018.
Cost-of-Living Adjustment (COLA)	Annual COLA is equal to 80% of the change in the CPI-U with a maximum rate of 5%. <u>Exception:</u> If hired before August 28, 1997, annual COLA is a minimum of 4% until benefit increases reach 65% of the original benefit (cap). After 65% cap is reached, annual COLA will be equal to 80% of the change in the CPI-U, with a maximum rate of 5%.	Annual COLA is equal to 80% of the change in the CPI-U with a maximum rate of 5%.	Annual COLA is equal to 80% of the change in the CPI-U with a maximum rate of 5%.
Survivor Benefit (death before retirement) Non Duty-Related Death	If employee is vested: - Survivor benefit to eligible spouse calculated using the joint & 100% survivor option or 80% of the member's life income annuity paid to eligible children under age 21. - If at least 3, but less than 5, years of service, the survivor benefit is calculated using 25% of the member's base benefit calculated as if the member retired on his/her date of death.	If employee is vested: Survivor benefit to eligible spouse calculated using the joint & 100% survivor option or 80% of the member's life income annuity paid to eligible children under age 21.	If employee is vested: Survivor benefit to eligible spouse calculated using the joint & 100% survivor option or 80% of the member's life income annuity paid to eligible children under age 21.
Duty-Related Death	Survivor benefit to eligible spouse or children no less than 50% of final average pay (no minimum service requirement).	Survivor benefit to eligible spouse or children no less than 50% of final average pay (no minimum service requirement).	Survivor benefit to eligible spouse or children no less than 50% of final average pay (no minimum service requirement).
Optional Forms of Payment	Payment options include: - Life income annuity - Unreduced joint & 50% survivor - Joint & 100% survivor 60 or 120 guaranteed payments - BackDROP	Payment options include: - Life income annuity - Joint & 50% survivor - Joint & 100% survivor 120 or 180 guaranteed payments - BackDROP	Payment options include: - Life income annuity - Joint & 50% survivor - Joint & 100% survivor 120 or 180 guaranteed payments
Disability	Long-term disability and work-related disability.	Long-term disability and work-related disability.	Long-term disability and work-related disability.
Employee Contributions	Non-contributory.	Non-contributory.	4% of gross pay.

* This summary describes the plan provisions in chapter 104 of the Missouri Revised Statutes. It does not overrule any other applicable statute or administrative rule and, in the event of a conflict, the applicable statute or rule would apply. The Year 2000 Plan was effective July 1, 2000 and the Year 2000 Plan – 2011 Tier was effective January 1, 2011. A complete summary is available at the MPERS office.

** Final Average Pay (FAP) – Average of highest 36 consecutive months of pay.

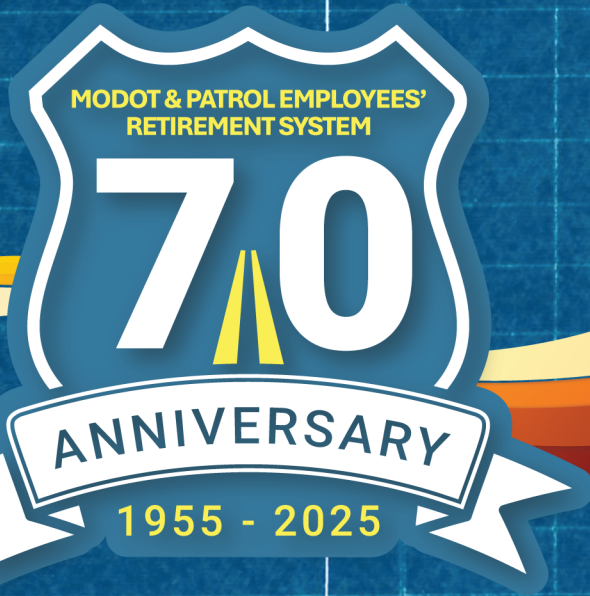
See note 2 of Notes to the Financial Statements for more information.

For the fiscal year ended June 30, 2025, no legislation became effective. One bill passed during this period will become effective on August 28, 2025. House Bill 147 was Truly Agreed and Passed and signed into law by Governor Kehoe. In summary, as it relates to MPERS, this bill included several changes to statutes in Chapter 105, specifically regarding proxy voting, ESG investment, and the handling of investment contracts as closed records. In addition, Section 105.689 was created to prevent investments in certain countries, specifically, certain Chinese investments. In large part, these changes align with MPERS' governance policies and existing practices.

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STATISTICAL SECTION

Measuring Progress, One Record at a Time



The Power of Public Data

In 1955, data collection looked very different. A clipboard, a pencil, and a steady hand were the tools of the trade as Missouri State Highway Patrol officers administered driver's exams across the state. Each test was recorded by hand, and each score was tallied manually. Yet even then, the value of accurate, consistent data was clear.

The retirement system, too, was built on numbers. From the beginning, actuarial soundness and statistical integrity were essential to its design. In its earliest years, projected benefits ranged from \$300 annually for an employee retiring after 30 years of service with a \$1,500 salary, to \$1,500 annually for someone retiring at top pay after three decades. These figures, though modest by today's standards, reflected a cautious and principled approach to long-term financial responsibility.

Today, data continues to guide every decision we make, from investment strategy to member services. But it all began with simple, carefully kept records and a belief that numbers could shape a better future.

Image:

MSHP officer administering a driver's exam, 1955



Financial Information

The chart on page 87 details a 10-year history of the additions (revenues) and deductions (expenses) of MPERS.

The chart on page 88 details a 10-year history of benefit payments by type.

Plan Membership

Overall, MPERS’ membership increased by 253. Retired members and their beneficiaries increased by 135, terminated-vested members decreased by 5, and active members increased by 123.

Other charts and graphs in this section detail demographic information concerning our members and employers.

Sources: All non-accounting data in this section was derived from internal sources as of June 30, and the annual actuarial valuation reports. Member data may differ between some schedules because the valuations are performed using data as of May 31 each year.

MoDOT and Patrol Employee's Retirement System
Changes in Net Position, Last Ten Fiscal Years

	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Additions										
Employer Contributions	\$ 199,609,396	\$ 206,562,924	\$ 204,955,180	\$ 210,166,927	\$ 210,871,852	\$ 208,212,848	\$ 212,711,117	\$ 232,813,995	\$ 254,358,101	\$ 252,427,148
Employee Contributions	2,503,824	3,238,502	3,721,983	4,449,428	4,983,989	5,334,102	5,899,734	6,838,152	8,249,824	9,771,317
Transfers from Other Systems	2,729,679	1,752,050	1,867,445	2,432,370	3,483,574	2,080,317	4,334,202	4,036,789	6,634,554	4,535,584
Other Contributions	978,689	1,645,487	1,279,434	1,546,916	1,563,362	1,761,860	2,421,844	573,233	997,691	459,802
Net Investment Income	21,432,090	220,301,127	197,619,367	154,326,511	(10,673,270)	699,644,251	122,767,485	264,756,429	432,121,321	460,643,075
Other Income	5	614	472	307	5,412	286	195	1,954	179	391
Plan Net Position	\$ 227,253,683	\$ 433,500,704	\$ 409,443,881	\$ 372,922,459	\$ 210,234,919	\$ 917,033,664	\$ 348,134,577	\$ 509,020,552	\$ 702,361,670	\$ 727,837,317
Deductions										
Benefit Payments	\$ 240,176,011	\$ 251,284,152	\$ 259,058,863	\$ 259,817,811	\$ 267,605,833	\$ 270,122,851	\$ 279,637,701	\$ 289,056,536	\$ 300,081,057	\$ 310,871,680
Administrative Expenses	4,370,860	4,515,458	4,693,492	4,372,966	4,291,028	4,585,473	5,229,018	5,529,258	6,250,950	6,158,138
Plan Net Position	\$ 244,546,871	\$ 255,799,610	\$ 263,752,355	\$ 264,190,777	\$ 271,896,861	\$ 274,708,324	\$ 284,866,719	\$ 294,585,794	\$ 306,332,007	\$ 317,029,818
Change in Net Position	\$ (17,293,188)	\$ 177,701,094	\$ 145,691,526	\$ 108,731,682	\$ (61,661,942)	\$ 642,325,340	\$ 63,267,858	\$ 214,434,758	\$ 396,029,663	\$ 410,807,499

MoDOT and Patrol Employees' Retirement System Benefit Payments by Type, Last Ten Fiscal Years

Type of Benefit	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025
Age and Service Benefits:										
Retiree and Survivor Annuity Payments	\$224,098,038	\$227,997,513	\$237,850,981	\$238,205,549	\$245,194,376	\$250,420,018	\$254,733,514	\$265,534,764	\$279,354,910	\$291,751,917
BackDROP Payments	10,677,166	16,887,349	14,546,108	15,424,880	15,787,033	13,585,357	17,688,088	15,605,731	12,241,819	12,206,197
Disability Benefits:										
Long Term Disability	66,389	60,352	49,613	35,987	26,488	21,023	14,370	8,884	20,789	—
Work-Related Disability	718,009	707,953	714,197	711,990	698,794	710,841	719,345	741,568	745,225	742,580
Normal Disability	109,027	109,455	110,310	112,000	114,119	115,952	100,068	94,927	96,833	95,746
Insured Disability	1,567,825	1,620,418	1,601,605	1,615,860	1,640,971	1,600,628	1,470,000	1,715,791	1,581,734	1,989,423
Death Benefits	820,000	855,153	860,000	820,000	890,000	1,255,000	1,130,000	1,065,000	960,000	1,082,500
Service Transfer Payments ⁽¹⁾	1,921,451	2,724,631	2,823,042	2,111,007	2,457,945	1,802,900	2,757,330	3,317,630	4,082,999	1,879,934
Employee Contribution Refunds:										
Separation	194,346	312,833	494,439	748,194	772,544	605,305	1,016,535	944,258	977,459	1,094,004
Death	3,760	8,495	58,537	32,344	23,563	5,827	11,451	27,983	19,289	29,379
Total Benefits	<u>\$240,176,011</u>	<u>\$251,284,152</u>	<u>\$259,108,832</u>	<u>\$259,817,811</u>	<u>\$267,605,833</u>	<u>\$270,122,851</u>	<u>\$279,640,701</u>	<u>\$289,056,536</u>	<u>\$300,081,057</u>	<u>\$310,871,680</u>

(1) Reciprocal transfer legislation enacted effective August 28, 2011.

MoDOT and Patrol Employees' Retirement System
Budget to Actual Report
For the Year Ended June 30, 2025

	Annual Budget	----- Actual ----- Year End	% Spent	Budget Variance Favorable / (Unfavorable)
<u>Administrative Expenses</u>				
Salary/Benefits	\$3,090,644	\$2,823,855	91.37%	\$ 266,789
Professional Services	273,450	230,958	84.46%	42,492
Meetings/Travel/Education	57,279	21,251	37.10%	36,028
Member Education	15,310	7,789	50.88%	7,521
Office Supplies	5,000	2,513	50.26%	2,487
Printing/Postage	36,500	31,949	87.53%	4,551
Membership Dues/Subscriptions	32,344	35,349	109.29%	(3,005)
Utilities	31,380	32,607	103.91%	(1,227)
Building Expenses/Maintenance	114,135	106,682	93.47%	7,453
Equipment/Furniture	11,065	10,364	93.66%	701
Information Technology	391,252	393,154	100.49%	(1,902)
Total Administrative Expenses	<u>\$4,058,359</u>	<u>\$3,696,471</u>	91.08%	<u>\$ 361,888</u>
<u>Investment Expenses</u>				
Salary/Benefits	\$3,793,139	\$3,144,360	82.90%	\$ 648,779
Investment Services	717,213	704,495	98.23%	12,718
Meetings/Travel/Education	111,605	55,764	49.97%	55,841
Direct Operating Expenses	101,305	96,948	95.70%	4,357
Total Investment Expenses	<u>\$4,723,262</u>	<u>\$4,001,567</u>	84.72%	<u>\$ 721,695</u>
TOTALS	<u>\$8,781,621</u>	<u>\$7,698,038</u>	<u>87.66%</u>	<u>\$1,083,583</u>

Reconciliation to Statement of Changes in Fiduciary Net Position, Administrative Expenses:

Total Administrative Expenses	\$6,158,138
Timber Salary Reimbursement	685,519
Investment General Consultant	360,147
Investment Custodian	313,848
Actuarial Experience Study	(7,600)
Depreciation Expense	(43,923)
OPEB Expense	159,050
OPEB Deferred Outflow	22,909
Capitalized Building Costs	49,950
	<u>\$7,698,038</u>

Statistical Section | Schedule of Retired Members by Type of Benefit

All Members*

Amount of Monthly Benefit	Type of Benefit						Total Recipients
	Retirement		Disability			Survivor	
	Normal	Early	Normal	Work-Related	Long-Term		
\$ 1 – 200	33	68	1	24	46	59	231
201 – 400	213	247	2	—	—	124	586
401 – 600	218	178	—	—	—	130	526
601 – 800	234	147	—	—	—	122	503
801 – 1,000	206	94	1	—	—	137	438
1,001 – 1,200	226	52	3	1	—	119	401
1,201 – 1,400	300	30	1	1	—	124	456
1,401 – 1,600	306	21	—	—	—	120	447
1,601 – 1,800	394	10	—	1	—	113	518
1,801 – 2,000	442	8	1	—	—	93	544
2,001 – 2,200	472	4	—	4	—	110	590
2,201 – 2,400	494	3	—	3	—	72	572
2,401 – 2,600	409	2	—	3	—	72	486
2,601 – 2,800	332	1	—	1	—	60	394
2,801 – 3,000	280	—	—	2	—	56	338
> 3,000	2,447	4	—	7	—	450	2,908
TOTALS	7,006	869	9	47	46	1,961	9,938

*This chart includes twelve retirement system staff retirees.

MoDOT

Amount of Monthly Benefit	Type of Benefit						Total Recipients
	Retirement		Disability			Survivor	
	Normal	Early	Normal	Work-Related	Long-Term		
\$ 1 – 200	24	50	1	20	40	53	188
201 – 400	157	199	2	—	—	106	464
401 – 600	163	143	—	—	—	110	416
601 – 800	161	121	—	—	—	105	387
801 – 1,000	153	83	1	—	—	117	354
1,001 – 1,200	175	44	3	1	—	105	328
1,201 – 1,400	229	24	1	1	—	110	365
1,401 – 1,600	249	16	—	—	—	109	374
1,601 – 1,800	326	9	—	1	—	100	436
1,801 – 2,000	361	7	1	—	—	78	447
2,001 – 2,200	404	4	—	4	—	95	507
2,201 – 2,400	422	3	—	3	—	63	491
2,401 – 2,600	362	2	—	2	—	60	426
2,601 – 2,800	294	1	—	1	—	47	343
2,801 – 3,000	248	—	—	—	—	35	283
> 3,000	1,352	3	—	6	—	286	1,647
TOTALS	5,080	709	9	39	40	1,579	7,456

Uniformed Patrol

Amount of Monthly Benefit	Type of Benefit						Total Recipients
	Retirement		Disability			Survivor	
	Normal	Early	Normal	Work-Related	Long-Term		
\$ 1 – 200	—	—	—	2	1	—	3
201 – 400	13	1	—	—	—	4	18
401 – 600	16	—	—	—	—	4	20
601 – 800	22	—	—	—	—	3	25
801 – 1,000	22	—	—	—	—	2	24
1,001 – 1,200	9	—	—	—	—	6	15
1,201 – 1,400	9	—	—	—	—	2	11
1,401 – 1,600	7	—	—	—	—	—	7
1,601 – 1,800	2	—	—	—	—	4	6
1,801 – 2,000	3	—	—	—	—	3	6
2,001 – 2,200	3	—	—	—	—	4	7
2,201 – 2,400	4	—	—	—	—	5	9
2,401 – 2,600	3	—	—	1	—	9	13
2,601 – 2,800	2	—	—	—	—	9	11
2,801 – 3,000	4	—	—	1	—	18	23
> 3,000	883	—	—	1	—	150	1,034
TOTALS	1,002	1	—	5	1	223	1,232

Civilian Patrol

Amount of Monthly Benefit	Type of Benefit						Total Recipients
	Retirement		Disability			Survivor	
	Normal	Early	Normal	Work-Related	Long-Term		
\$ 1 – 200	9	18	—	2	5	6	40
201 – 400	43	47	—	—	—	14	104
401 – 600	39	35	—	—	—	16	90
601 – 800	51	25	—	—	—	14	90
801 – 1,000	31	11	—	—	—	18	60
1,001 – 1,200	42	8	—	—	—	8	58
1,201 – 1,400	62	6	—	—	—	12	80
1,401 – 1,600	50	5	—	—	—	11	66
1,601 – 1,800	65	1	—	—	—	9	75
1,801 – 2,000	78	1	—	—	—	12	91
2,001 – 2,200	65	—	—	—	—	11	76
2,201 – 2,400	68	—	—	—	—	4	72
2,401 – 2,600	43	—	—	—	—	3	46
2,601 – 2,800	36	—	—	—	—	4	40
2,801 – 3,000	27	—	—	1	—	3	31
> 3,000	205	—	—	—	—	14	219
TOTALS	914	157	—	3	5	159	1,238

Statistical Section | Schedule of Average Monthly Benefit Payments

MoDOT By Years of Service

Retired In Fiscal Year		0 – 10	11 – 15	16 – 20	21 – 25	26 – 30	31 – 35	36 – 40	41+
2016	Average Benefit	\$ 385	\$ 639	\$ 1,103	\$ 1,954	\$ 2,910	\$ 3,916	\$ 5,236	\$ —
2016	Average FAP	\$ 2,845	\$ 2,710	\$ 2,889	\$ 3,768	\$ 4,325	\$ 4,709	\$ 5,147	\$ —
2016	Current Retirees	29	23	24	44	76	13	2	—
2017	Average Benefit	\$ 409	\$ 684	\$ 1,181	\$ 1,796	\$ 3,088	\$ 4,255	\$ 3,143	\$ —
2017	Average FAP	\$ 2,589	\$ 2,828	\$ 3,101	\$ 3,581	\$ 4,614	\$ 4,801	\$ 3,717	\$ —
2017	Current Retirees	37	29	27	53	81	12	3	—
2018	Average Benefit	\$ 368	\$ 717	\$ 1,233	\$ 1,913	\$ 3,113	\$ 4,258	\$ 3,699	\$ —
2018	Average FAP	\$ 2,582	\$ 3,009	\$ 3,410	\$ 3,971	\$ 4,559	\$ 4,957	\$ 3,909	\$ —
2018	Current Retirees	30	33	34	46	69	10	1	—
2019	Average Benefit	\$ 382	\$ 773	\$ 1,183	\$ 1,896	\$ 3,324	\$ 3,716	\$ 3,365	\$ —
2019	Average FAP	\$ 2,616	\$ 3,037	\$ 3,444	\$ 3,918	\$ 4,727	\$ 4,594	\$ 4,015	\$ —
2019	Current Retirees	31	22	37	44	63	14	4	—
2020	Average Benefit	\$ 376	\$ 684	\$ 1,254	\$ 1,927	\$ 3,417	\$ 4,188	\$ 3,826	\$ 5,816
2020	Average FAP	\$ 2,724	\$ 3,128	\$ 3,470	\$ 3,808	\$ 4,646	\$ 4,890	\$ 5,237	\$ 5,540
2020	Current Retirees	27	25	33	57	87	7	3	2
2021	Average Benefit	\$ 337	\$ 846	\$ 1,210	\$ 1,915	\$ 3,211	\$ 3,688	\$ 3,527	\$ 3,404
2021	Average FAP	\$ 2,859	\$ 3,164	\$ 3,444	\$ 3,790	\$ 4,333	\$ 4,624	\$ 4,677	\$ 3,460
2021	Current Retirees	29	17	46	66	57	13	3	1
2022	Average Benefit	\$ 336	\$ 786	\$ 1,193	\$ 1,968	\$ 3,211	\$ 3,523	\$ 2,860	\$ 3,524
2022	Average FAP	\$ 2,769	\$ 3,420	\$ 3,578	\$ 3,788	\$ 4,455	\$ 4,622	\$ 4,108	\$ 3,993
2022	Current Retirees	45	37	46	70	72	16	3	2
2023	Average Benefit	\$ 359	\$ 707	\$ 1,212	\$ 2,090	\$ 3,245	\$ 4,247	\$ 3,512	\$ —
2023	Average FAP	\$ 2,928	\$ 3,259	\$ 3,835	\$ 4,045	\$ 4,790	\$ 5,199	\$ 4,353	\$ —
2023	Current Retirees	43	41	43	53	72	9	1	—
2024	Average Benefit	\$ 324	\$ 706	\$ 1,175	\$ 2,304	\$ 3,324	\$ 3,546	\$ 3,379	\$ 3,702
2024	Average FAP	\$ 2,819	\$ 3,334	\$ 3,844	\$ 4,198	\$ 4,830	\$ 5,417	\$ 5,616	\$ 5,393
2024	Current Retirees	37	42	41	56	68	18	2	1
2025	Average Benefit	\$ 380	\$ 707	\$ 1,274	\$ 2,353	\$ 3,513	\$ 4,528	\$ 4,910	\$ 6,949
2025	Average FAP	\$ 3,313	\$ 3,403	\$ 4,071	\$ 4,418	\$ 5,212	\$ 6,429	\$ 6,326	\$ 7,837
2025	Current Retirees	46	29	49	47	72	22	6	2

FAP = Final Average Pay

Statistical Section | Schedule of Average Monthly Benefit Payments

Uniformed Patrol By Years of Service

Retired In Fiscal Year		0 – 10	11 – 15	16 – 20	21 – 25	26 – 30	31 – 35	36 – 40	41+
2016	Average Benefit	\$ 338	\$ 1,428	\$ —	\$ 5,255	\$ 6,083	\$ 8,007	\$ —	\$ —
2016	Average FAP	\$ 2,599	\$ 3,804	\$ —	\$ 6,405	\$ 6,559	\$ 7,039	\$ —	\$ —
2016	Current Retirees	1	1	—	4	12	4	—	—
2017	Average Benefit	\$ 708	\$ 1,369	\$ 3,775	\$ 5,189	\$ 6,284	\$ 9,868	\$ 9,092	\$ —
2017	Average FAP	\$ 2,791	\$ 3,804	\$ 5,548	\$ 5,621	\$ 6,786	\$ 7,841	\$ 7,077	\$ —
2017	Current Retirees	2	2	1	1	29	1	1	—
2018	Average Benefit	\$ 493	\$ 1,317	\$ 1,900	\$ 4,757	\$ 6,122	\$ —	\$ —	\$ —
2018	Average FAP	\$ 2,566	\$ 3,430	\$ 3,943	\$ 7,001	\$ 6,771	\$ —	\$ —	\$ —
2018	Current Retirees	2	3	1	4	25	—	—	—
2019	Average Benefit	\$ 439	\$ 1,325	\$ 2,281	\$ 4,104	\$ 5,841	\$ 7,378	\$ —	\$ —
2019	Average FAP	\$ 2,748	\$ 3,589	\$ 4,417	\$ 6,051	\$ 6,930	\$ 7,472	\$ —	\$ —
2019	Current Retirees	3	1	2	4	33	6	—	—
2020	Average Benefit	\$ 657	\$ 925	\$ 2,719	\$ 4,143	\$ 5,675	\$ 6,780	\$ —	\$ —
2020	Average FAP	\$ 3,004	\$ 3,047	\$ 5,530	\$ 6,246	\$ 6,929	\$ 6,915	\$ —	\$ —
2020	Current Retirees	5	1	3	5	25	4	—	—
2021	Average Benefit	\$ 625	\$ —	\$ —	\$ 3,694	\$ 5,513	\$ 6,527	\$ —	\$ —
2021	Average FAP	\$ 3,261	\$ —	\$ —	\$ 6,136	\$ 6,984	\$ 7,164	\$ —	\$ —
2021	Current Retirees	8	—	—	5	30	6	—	—
2022	Average Benefit	\$ 691	\$ 1,016	\$ 2,714	\$ 4,243	\$ 5,170	\$ 6,070	\$ —	\$ —
2022	Average FAP	\$ 3,277	\$ 3,602	\$ 5,407	\$ 6,684	\$ 6,918	\$ 6,980	\$ —	\$ —
2022	Current Retirees	4	3	1	5	43	3	—	—
2023	Average Benefit	\$ 678	\$ 1,223	\$ 2,456	\$ 3,850	\$ 5,054	\$ 6,799	\$ —	\$ —
2023	Average FAP	\$ 3,142	\$ 4,043	\$ 5,761	\$ 6,302	\$ 7,003	\$ 7,819	\$ —	\$ —
2023	Current Retirees	8	2	2	5	52	6	—	—
2024	Average Benefit	\$ 566	\$ 1,167	\$ —	\$ 3,989	\$ 5,027	\$ 6,273	\$ —	\$ —
2024	Average FAP	\$ 3,106	\$ 4,001	\$ —	\$ 6,433	\$ 7,511	\$ 8,197	\$ —	\$ —
2024	Current Retirees	10	2	—	3	42	4	—	—
2025	Average Benefit	\$ 435	\$ 1,320	\$ 3,131	\$ 4,321	\$ 5,075	\$ 6,032	\$ 10,713	\$ —
2025	Average FAP	\$ 2,918	\$ 4,557	\$ 7,224	\$ 8,009	\$ 7,682	\$ 8,502	\$ 13,727	\$ —
2025	Current Retirees	8	3	1	4	30	7	1	—

FAP = Final Average Pay

Statistical Section | Schedule of Average Monthly Benefit Payments

Civilian Patrol By Years of Service

Retired In Fiscal Year		0 – 10	11 – 15	16 – 20	21 – 25	26 – 30	31 – 35	36 – 40	41+
2016	Average Benefit	\$ 203	\$ 676	\$ 1,098	\$ 2,012	\$ 2,715	\$ 3,511	\$ —	\$ —
2016	Average FAP	\$ 2,457	\$ 2,643	\$ 2,989	\$ 3,585	\$ 3,820	\$ 5,718	\$ —	\$ —
2016	Current Retirees	6	6	5	7	15	1	—	—
2017	Average Benefit	\$ 365	\$ 767	\$ 1,479	\$ 1,685	\$ 2,770	\$ 3,726	\$ 3,726	\$ —
2017	Average FAP	\$ 2,614	\$ 2,712	\$ 3,582	\$ 3,301	\$ 4,270	\$ 4,425	\$ 3,919	\$ —
2017	Current Retirees	7	5	6	13	18	5	1	—
2018	Average Benefit	\$ 212	\$ 871	\$ 1,258	\$ 2,119	\$ 2,530	\$ 2,694	\$ 6,519	\$ —
2018	Average FAP	\$ 1,955	\$ 3,162	\$ 3,452	\$ 4,002	\$ 3,996	\$ 3,379	\$ 7,510	\$ —
2018	Current Retirees	3	5	6	7	11	4	1	—
2019	Average Benefit	\$ 499	\$ 863	\$ 987	\$ 1,592	\$ 2,779	\$ 3,212	\$ —	\$ —
2019	Average FAP	\$ 3,035	\$ 3,094	\$ 3,111	\$ 3,228	\$ 3,751	\$ 3,912	\$ —	\$ —
2019	Current Retirees	4	6	6	6	5	5	—	—
2020	Average Benefit	\$ 395	\$ 574	\$ 1,222	\$ 1,795	\$ 2,849	\$ 2,742	\$ —	\$ 4,503
2020	Average FAP	\$ 2,804	\$ 2,638	\$ 3,176	\$ 3,711	\$ 4,141	\$ 3,125	\$ —	\$ 4,079
2020	Current Retirees	5	4	7	9	15	2	—	1
2021	Average Benefit	\$ 266	\$ 636	\$ 1,145	\$ 1,808	\$ 3,290	\$ 2,889	\$ —	\$ —
2021	Average FAP	\$ 2,326	\$ 2,991	\$ 3,626	\$ 3,575	\$ 4,754	\$ 3,188	\$ —	\$ —
2021	Current Retirees	9	10	10	11	9	1	—	—
2022	Average Benefit	\$ 399	\$ 640	\$ 984	\$ 1,850	\$ 3,167	\$ 4,242	\$ 2,900	\$ —
2022	Average FAP	\$ 2,980	\$ 2,736	\$ 3,131	\$ 3,573	\$ 4,430	\$ 5,575	\$ 3,411	\$ —
2022	Current Retirees	11	10	10	18	15	6	2	—
2023	Average Benefit	\$ 415	\$ 651	\$ 1,026	\$ 1,947	\$ 3,706	\$ 2,052	\$ —	\$ —
2023	Average FAP	\$ 3,170	\$ 2,908	\$ 3,218	\$ 3,834	\$ 5,385	\$ 2,846	\$ —	\$ —
2023	Current Retirees	7	12	7	9	12	1	—	—
2024	Average Benefit	\$ 293	\$ 767	\$ 1,585	\$ 1,956	\$ 3,420	\$ 4,064	\$ —	\$ —
2024	Average FAP	\$ 2,517	\$ 3,438	\$ 4,110	\$ 4,075	\$ 4,969	\$ 4,851	\$ —	\$ —
2024	Current Retirees	16	3	5	8	14	2	—	—
2025	Average Benefit	\$ 282	\$ 530	\$ 1,042	\$ 2,805	\$ 3,547	\$ 2,589	\$ —	\$ 6,222
2025	Average FAP	\$ 2,927	\$ 2,843	\$ 4,208	\$ 5,011	\$ 5,452	\$ 3,971	\$ —	\$ 7,635
2025	Current Retirees	9	5	6	10	12	3	—	1

FAP = Final Average Pay

MPERS By Years of Service

Retired In Fiscal Year		0 – 10	11 – 15	16 – 20	21 – 25	26 – 30	31 – 35	36 – 40	41+
2016	Average Benefit	\$ —	\$ —	\$ —	\$ 4,524	\$ —	\$ —	\$ —	\$ —
2016	Average FAP	\$ —	\$ —	\$ —	\$ 9,414	\$ —	\$ —	\$ —	\$ —
2016	Current Retirees	—	—	—	1	—	—	—	—
2020	Average Benefit	\$ —	\$ —	\$ —	\$ —	\$ —	\$11,023	\$ —	\$ —
2020	Average FAP	\$ —	\$ —	\$ —	\$ —	\$ —	\$12,079	\$ —	\$ —
2020	Current Retirees	—	—	—	—	—	1	—	—
2023	Average Benefit	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,183	\$ —	\$ —
2023	Average FAP	\$ —	\$ —	\$ —	\$ —	\$ —	\$ 4,644	\$ —	\$ —
2023	Current Retirees	—	—	—	—	—	1	—	—
2024	Average Benefit	\$ —	\$ 628	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
2024	Average FAP	\$ —	\$ 4,022	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
2024	Current Retirees	—	1	—	—	—	—	—	—

Note: There were no retirements during the years not shown above.

FAP = Final Average Pay

Statistical Section | Schedule of Participating Employers

	MoDOT		Patrol		MPERS		Total	
	Employees	%	Employees	%	Employees	%	Employees	%
2016	5,059	67.70	2,398	32.09	16	0.21	7,473	100.00
2017	5,056	67.86	2,379	31.93	16	0.21	7,451	100.00
2018	5,065	68.31	2,334	31.47	16	0.22	7,415	100.00
2019	5,081	68.51	2,318	31.26	17	0.23	7,416	100.00
2020	5,031	68.59	2,287	31.18	17	0.23	7,335	100.00
2021	4,913	68.29	2,263	31.46	18	0.25	7,194	100.00
2022	4,629	67.52	2,209	32.22	18	0.26	6,856	100.00
2023	4,435	66.97	2,168	32.74	19	0.29	6,622	100.00
2024	4,710	68.38	2,157	31.32	21	0.30	6,888	100.00
2025	4,761	67.91	2,228	31.78	22	0.31	7,011	100.00

Data for this chart is as of June 30, 2025.

By Age
Closed Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<21	—	—	—	—	—
21 – 25	—	—	—	—	—
26 – 30	—	—	—	—	—
31 – 35	—	—	—	—	—
36 – 40	—	—	—	—	—
41 – 45	24	18	4	1	1
46 – 50	243	159	27	57	—
51 – 55	354	203	39	110	2
56 – 60	209	140	32	36	1
61 – 65	81	66	15	—	—
66+	20	16	4	—	—
Total	931	602	121	204	4
Average Age		54	54	52	52

Year 2000 Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<21	—	—	—	—	—
21 – 25	—	—	—	—	—
26 – 30	—	—	—	—	—
31 – 35	7	5	1	1	—
36 – 40	236	120	34	80	2
41 – 45	448	259	70	117	2
46 – 50	418	264	57	96	1
51 – 55	316	222	49	41	4
56 – 60	222	156	56	8	2
61 – 65	102	85	17	—	—
66+	24	20	4	—	—
Total	1,773	1,131	288	343	11
Average Age		49	49	44	49

Year 2000 Plan – 2011 Tier

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<21	91	88	3	—	—
21 – 25	526	357	80	89	—
26 – 30	733	447	118	166	2
31 – 35	778	470	125	182	1
36 – 40	600	420	79	100	1
41 – 45	403	328	53	21	1
46 – 50	307	237	58	11	1
51 – 55	353	283	66	3	1
56 – 60	303	233	69	1	—
61 – 65	171	134	37	—	—
66+	42	31	11	—	—
Total	4,307	3,028	699	573	7
Average Age		39	39	31	38

By Years of Service

Closed Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<01	1	—	1	—	—
01 – 05	4	3	—	1	—
06 – 10	6	4	2	—	—
11 – 15	19	13	5	1	—
16 – 20	11	8	2	1	—
21 – 25	148	112	18	18	—
26 – 30	514	305	66	141	2
31 – 35	184	119	22	41	2
36 – 40	31	27	3	1	—
41 – 45	7	6	1	—	—
46+	6	5	1	—	—
Total	931	602	121	204	4
Average Service		28	27	28	29

Year 2000 Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<01	20	15	5	—	—
01 – 05	36	29	5	1	1
06 – 10	60	47	13	—	—
11 – 15	218	121	50	44	3
16 – 20	812	506	131	170	5
21 – 25	617	410	83	123	1
26 – 30	10	3	1	5	1
31 – 35	—	—	—	—	—
36 – 40	—	—	—	—	—
41 – 45	—	—	—	—	—
46+	—	—	—	—	—
Total	1,773	1,131	288	343	11
Average Service		18	18	19	17

Year 2000 Plan – 2011 Tier

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<01	726	578	119	28	1
01 – 05	1,913	1,379	297	234	3
06 – 10	1,215	843	180	191	1
11 – 15	452	227	103	120	2
16 – 20	—	—	—	—	—
21 – 25	1	1	—	—	—
26 – 30	—	—	—	—	—
31 – 35	—	—	—	—	—
36 – 40	—	—	—	—	—
41 – 45	—	—	—	—	—
46+	—	—	—	—	—
Total	4,307	3,028	699	573	7
Average Service		4	5	6	5

By Age Closed Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<21	—	—	—	—	—
21 – 25	—	—	—	—	—
26 – 30	—	—	—	—	—
31 – 35	—	—	—	—	—
36 – 40	—	—	—	—	—
41 – 45	19	17	2	—	—
46 – 50	124	101	14	8	1
51 – 55	280	209	29	42	—
56 – 60	214	199	14	1	—
61 – 65	53	49	4	—	—
66+	1	1	—	—	—
Total	691	576	63	51	1
Average Age		54	53	52	48

Year 2000 Plan

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<21	—	—	—	—	—
21 – 25	—	—	—	—	—
26 – 30	—	—	—	—	—
31 – 35	7	5	2	—	—
36 – 40	142	94	22	26	—
41 – 45	289	227	45	17	—
46 – 50	255	210	26	19	—
51 – 55	201	164	29	8	—
56 – 60	108	97	9	2	—
61 – 65	13	13	—	—	—
66+	1	1	—	—	—
Total	1,016	811	133	72	—
Average Age		47	46	44	—

Year 2000 Plan – 2011 Tier

Age	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<21	—	—	—	—	—
21 – 25	3	3	—	—	—
26 – 30	44	32	8	4	—
31 – 35	143	105	21	17	—
36 – 40	112	77	22	12	1
41 – 45	52	46	3	3	—
46 – 50	46	40	5	1	—
51 – 55	38	25	10	3	—
56 – 60	33	27	6	—	—
61 – 65	26	23	3	—	—
66+	2	2	—	—	—
Total	499	380	78	40	1
Average Age		41	41	36	36

By Years of Service

Closed Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<01	—	—	—	—	—
01 – 05	94	73	12	9	—
06 – 10	285	234	24	26	1
11 – 15	168	143	17	8	—
16 – 20	96	88	5	3	—
21 – 25	44	34	5	5	—
26 – 30	3	3	—	—	—
31 – 35	—	—	—	—	—
36 – 40	1	1	—	—	—
41 – 45	—	—	—	—	—
46+	—	—	—	—	—
Total	691	576	63	51	1
Average Service		11	10	10	8

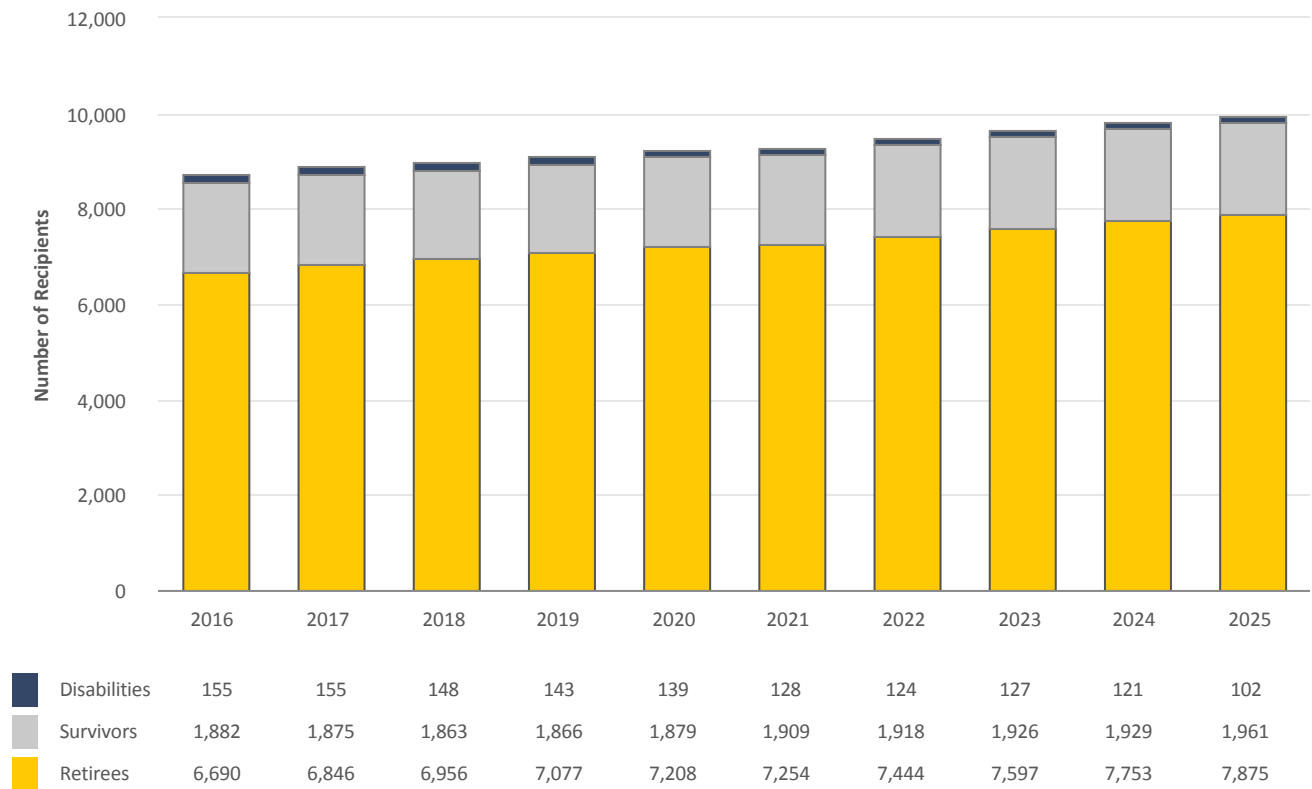
Year 2000 Plan

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<01	—	—	—	—	—
01 – 05	104	87	14	3	—
06 – 10	518	418	62	38	—
11 – 15	272	207	44	21	—
16 – 20	103	82	12	9	—
21 – 25	19	17	1	1	—
26 – 30	—	—	—	—	—
31 – 35	—	—	—	—	—
36 – 40	—	—	—	—	—
41 – 45	—	—	—	—	—
46+	—	—	—	—	—
Total	1,016	811	133	72	—
Average Service		10	10	11	—

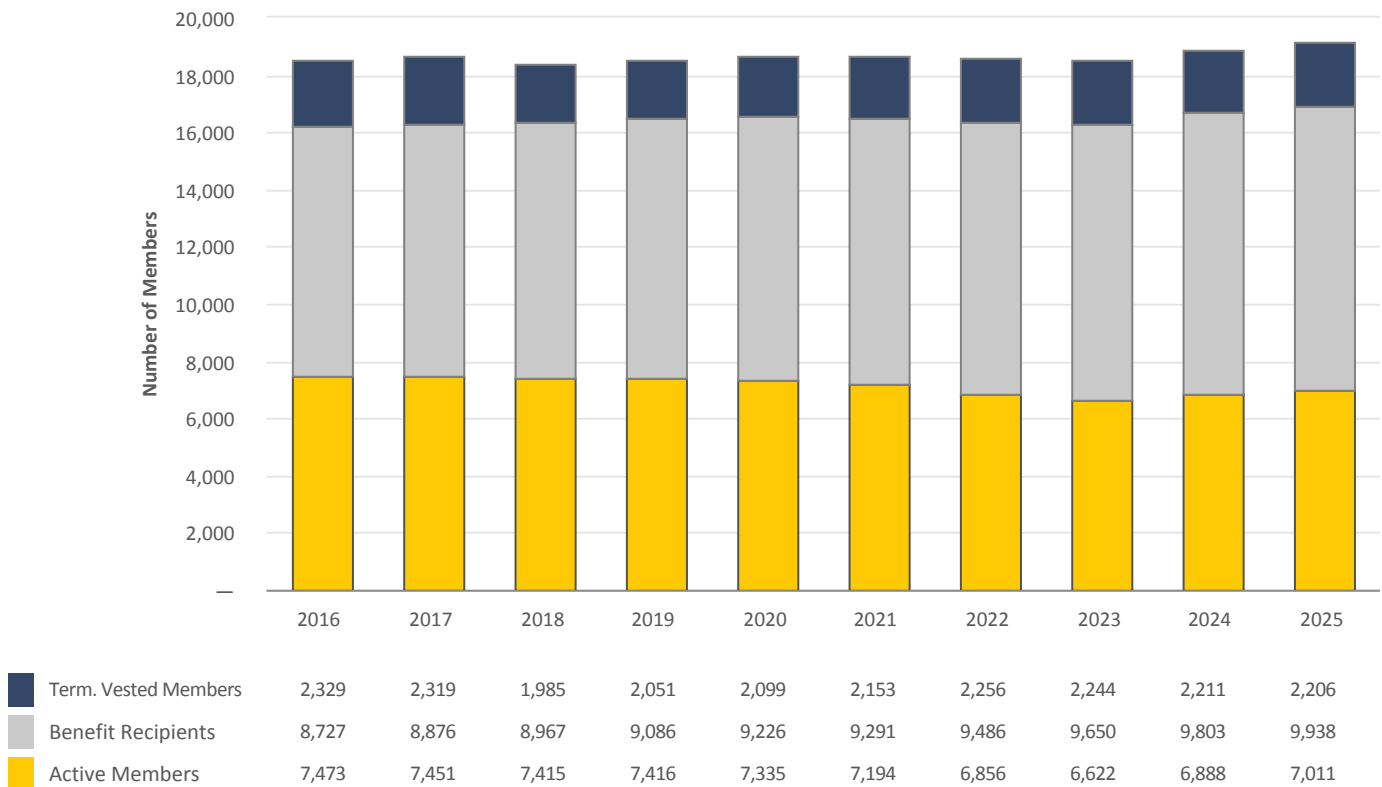
Year 2000 Plan – 2011 Tier

Years of Service	Total	MoDOT	Civilian Patrol	Uniformed Patrol	MPERS
<01	—	—	—	—	—
01 – 05	183	141	27	15	—
06 – 10	299	230	45	23	1
11 – 15	17	9	6	2	—
16 – 20	—	—	—	—	—
21 – 25	—	—	—	—	—
26 – 30	—	—	—	—	—
31 – 35	—	—	—	—	—
36 – 40	—	—	—	—	—
41 – 45	—	—	—	—	—
46+	—	—	—	—	—
Total	499	380	78	40	1
Average Service		6	7	7	7

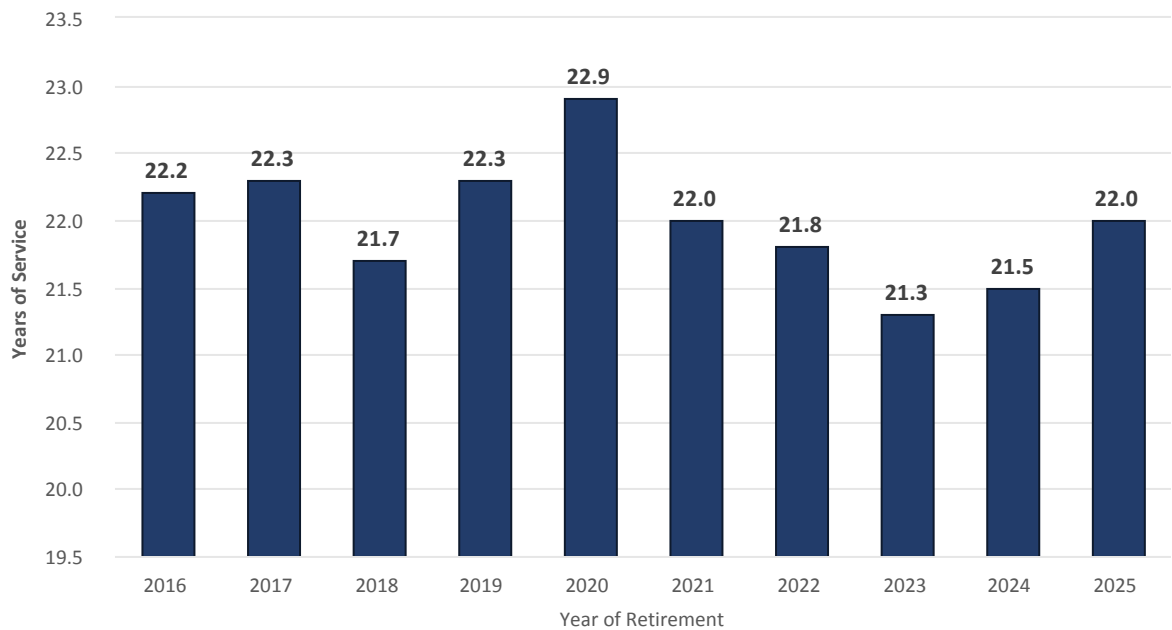
Benefit Recipients



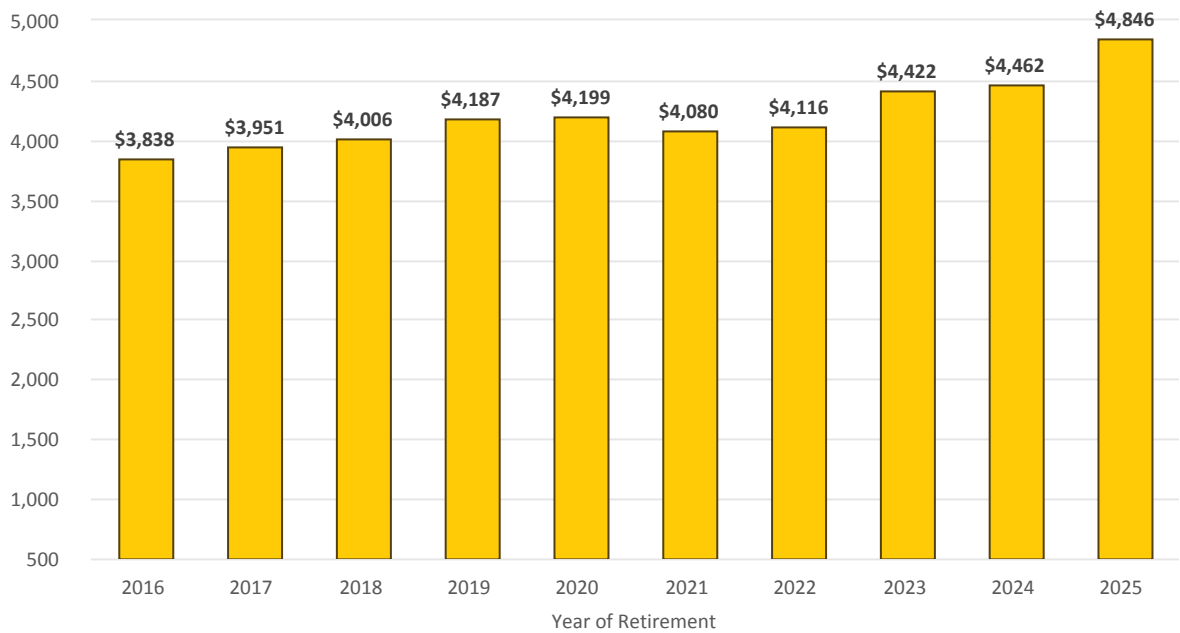
Membership Distribution



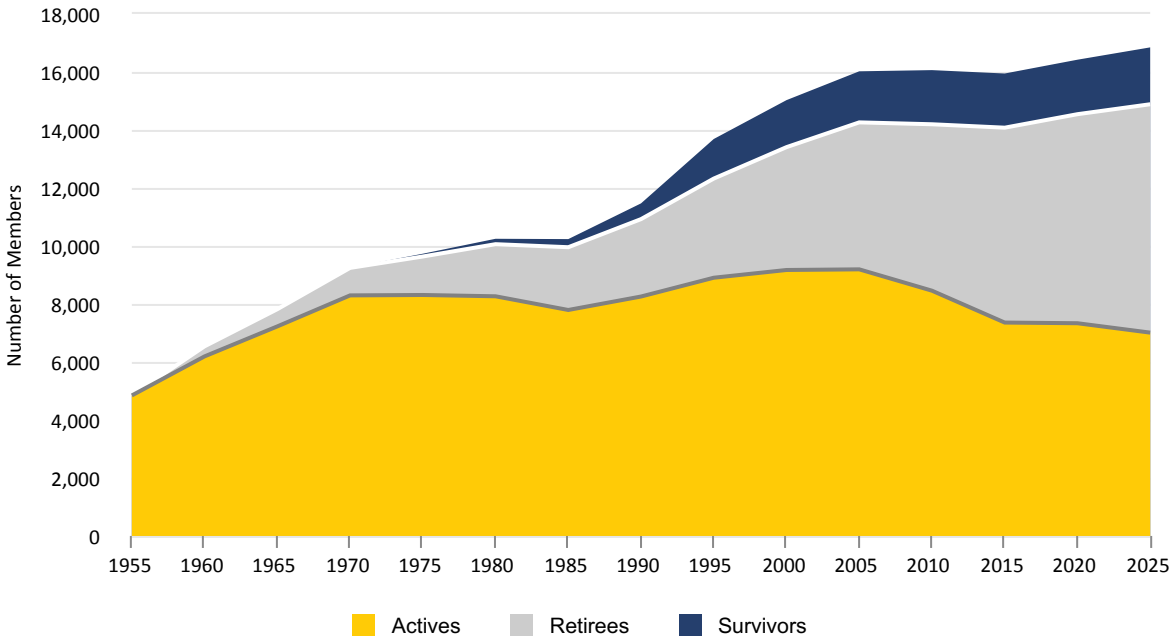
Average Years of Service for New Retirees



Final Average Pay for New Retirees



MPERS Membership Over the Years



Statistical Section | Location of MPERS Retirees

This map represents the demographic distribution of retirees by state and country as of June 30, 2025.

